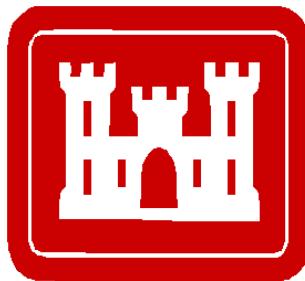


**SEMI-ANNUAL COMPLIANCE REPORT
JANUARY THROUGH JUNE 2015**

**OPERATION AND MAINTENANCE OF THE
GROUNDWATER TREATMENT PLANT
SOUTH JERSEY CLOTHING COMPANY/
GARDEN STATE CLEANERS SUPERFUND SITE
MINOTOLA, NEW JERSEY**



Prepared for:

**U.S. Army Corps of Engineers
Philadelphia District**

**Contract No. W912DQ-10-D-3011
Delivery Order CF02**

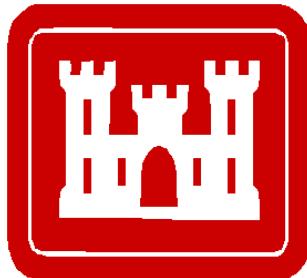
October 2015



HGL
HydroGeoLogic, Inc

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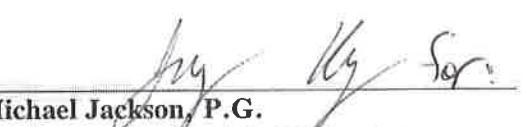
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LIST OF ACRONYMS AND ABBREVIATIONS

amsl	above mean sea level
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
cis-1,2-DCE	cis-1,2-dichloroethene
COC	contaminants of concern
DGW	discharge to groundwater
EDD	electronic data deliverables
EQ	equalization
ft	feet
ft/ft	feet per foot
GETS	groundwater extraction treatment system
gpm	gallons per minute
GSC	Garden State Cleaners
GWTP	groundwater treatment plant
HGL	HydroGeoLogic, Inc.
LPGAC	liquid-phase granular activated carbon
LTRA	long-term response action
$\mu\text{g/L}$	micrograms per liter
NJAC	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
NJPDES	New Jersey Pollutant Discharge Elimination System
%	percent
PCE	tetrachloroethene
PEV	Permit Equivalent Update
QA	quality assurance
QC	quality control
ROD	Record of Decision
Sevenson	Sevenson Environmental Services, Inc.
SJCC	South Jersey Clothing Company
TCE	trichloroethene
TDS	total dissolved solids
TET	treated effluent holding tank
TSS	total suspended solids

LIST OF ACRONYMS AND ABBREVIATIONS

UFP-QAPP	Uniform Federal Policy-Quality Assurance Project Plan
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
VOC	volatile organic compound

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1.0 INTRODUCTION

HydroGeoLogic, Inc. (HGL) has prepared this Semi-Annual Compliance Report for the U.S. Army Corps of Engineers (USACE)-Philadelphia District under Contract W912DQ-10-D-3011, Delivery Order CF02. The reporting period for this report is January 2015 through June 2015. The purpose of this report is to evaluate the compliance status of the South Jersey Clothing Company (SJCC)/Garden State Cleaners (GSC) groundwater extraction treatment system (GETS) with respect to the New Jersey Pollutant Discharge Elimination System (NJPDES) Discharge to Groundwater (DGW) Permit Equivalent (New Jersey Department of Environmental Protection [NJDEP], 1997). The Permit Equivalent was originally issued in April 1997, and updated in December 2005. The GETS is currently operating under the conditions of the Permit Equivalent Update (PEV). HGL has prepared this report in accordance with Section VIII of the PEV.

HGL began operations of the treatment plant on March 9, 2013. The evaluation of compliance status is based on data and documents including monthly operations reports, electronic data deliverables (EDD) for groundwater and plant sampling events, groundwater elevation data, field sampling logs, and well construction information. In addition, HGL reviewed the NJPDES-DGW PEV (NJDEP, 2005); the *Project-Specific Uniform Federal Policy Quality Assurance Project Plan, Operation and Maintenance of the Groundwater Treatment Plant (UFP-QAPP)* (HGL, 2014); and the *Operation and Maintenance Manual* (Sevenson Environmental Services, Inc. [Sevenson], 2012).

1.1 SITE DESCRIPTION AND HISTORY

The former SJCC is a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site located in the town of Minotola, Buena Borough, Atlantic County, New Jersey, near the intersection of Central and Atlantic Avenues. The GSC Superfund Site is located approximately 500 feet (ft) south of SJCC as shown in Figure 1. Cleanup and monitoring of the SJCC and GSC sites were addressed jointly by the U.S. Environmental Protection Agency (USEPA) due to similar contamination and proximity to one another. USEPA Region 2 is the lead agency for ongoing long-term response actions (LTRAs) that are performed at the SJCC/GSC site; the USACE-Philadelphia District provides oversight of the response actions and ensures that quality assurance (QA) goals are met.

The SJCC/GSC site is located upgradient to a suburban area with some light industry, and approximately 2,000 ft south of the site is the Cleary Junior High School. Wells within 3 miles of the site supply drinking water to approximately 9,000 people. No surface water features are situated in the immediate vicinity of the site, and the surrounding area encompasses over 3,800 acres of prime irrigated agricultural area. The GETS is housed on site in a large pre-engineered building. Extraction wells, injection wells, and an injection trench are part of the site system.

The GETS is an automated treatment facility designed to extract approximately 500 gallons per minute (gpm) of water from groundwater extraction wells. Contaminated groundwater passes through two 20,000-pound liquid-phase granular activated carbon (LPGAC) units connected in a series arrangement. The process water is then treated with sodium hypochlorite and the system effluent is returned to the aquifer via several reinjection wells located upgradient of the treatment system building. Although the treatment system includes several solids removal components, the influent metals concentrations, namely iron, were lower than anticipated in the system design. Therefore, the solids removal portion of the system has remained in bypass mode for several years.

The site's current primary contaminants of concern (COC) are volatile organic compounds (VOC), specifically trichloroethene (TCE) and tetrachloroethene (PCE), in the air and aqueous media. The locations of the SJCC/GSC groundwater treatment plant (GWTP), extraction and monitoring wells, and the injection well field are shown in Figure 2.

1.2 NJPDES-DGW PERMIT EQUIVALENT AND SAMPLING SCHEDULE

The SJCC/GSC GETS operates under the NJPDES-DGW PEV, which was issued on December 28, 2005. The NJPDES/DGW Permit Equivalency requires a semi-annual submittal summarizing the quarterly groundwater monitoring well water level data and semi-annual COC concentrations; a GETS monthly effluent sampling results table; and a comparison of the sampling results to the permit discharge limits. The PEV authorizes discharge from the pump-and-treat process into the aquifer through injection wells upgradient of the contaminated plume for a period of up to 30 years from the first date of discharge (April 1999). To verify compliance with the requirements of the NJPDES/DGW Permit Equivalency, and compare the results to the NJDEP Groundwater Quality Standards New Jersey Administrative Code (NJAC) 7:9C and the 2010 USEPA Record of Decision (ROD), groundwater monitoring samples are collected from 86 existing locations (19 extraction wells, 58 monitoring wells, 9 residential wells) on a semi-annual or annual basis. Groundwater samples are collected from seven monitoring wells on a biennial basis. Influent, intermediate, and effluent process liquid samples are collected from the pump and treat system to monitor plant performance and refine operating conditions, as necessary, to optimize performance. Samples are analyzed to verify compliance with the requirements of the NJPDES/DGW Permit Equivalency and compared to the NJDEP Groundwater Quality Standards NJAC 7:9C, as well as the 2010 USEPA ROD.

The original Permit Equivalent specifies effluent limits, influent and effluent monitoring requirements, and groundwater monitoring requirements. The effluent discharge criteria for

the original Permit Equivalent are shown on Table 1. The semi-annual sampling and water level schedule are presented in Appendix A.

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2.0 GROUNDWATER TREATMENT SYSTEM PERFORMANCE

From January to June 2015, the SJCC/GSC GETS operated on a nearly continuous basis, with approximately 26.75 hours of downtime. Details on the downtime experienced during this 6-month reporting period are presented in Table 2.

Review of the data included in the monthly operations reports prepared by HGL reveals that an estimated total of 117 million gallons of groundwater were treated during this 6-month period, resulting in the removal of approximately 4.89 pounds of PCE and 28.4 pounds of TCE. The total groundwater treated and PCE/TCE removal rates for each month of the reporting period are summarized in Table 3. As shown in Table 4, mass removal efficiencies for this reporting period were 100 percent (%) for both PCE and TCE.

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3.0 GROUNDWATER TREATMENT SYSTEM SAMPLING

Water treatment system sampling is conducted during the operation of the plant to monitor plant treatment efficiency, to determine whether carbon breakthrough has occurred, and to verify that discharge parameters are met. Water treatment system sampling is conducted monthly and consists of laboratory analysis of samples collected from the equalization (EQ) tank after the liquid-phase carbon adsorption unit (ALPC1 or ALPC2), and from the treated effluent holding tank (TET). In addition, an aqueous sample is generally collected on a weekly basis from a point after one of the ALPC units. This liquid phase mid-carbon sample point is sampled for VOCs, per contract specifications.

The two ALPC units alternate as either lead or lag depending on carbon condition. That is, the lead unit always contains carbon that is more expended than the carbon in the lag unit. When breakthrough has been identified at the discharge side of the lead ALPC unit, the carbon in the lead unit is changed out. At this time, the unit with the partially spent carbon becomes the lead unit and the unit with the fresh carbon becomes the lag unit. Thus, the lead and lag units change on an alternating basis. As a result, the weekly sample collected from either the discharge side of the lead APLC unit or the discharge side of the lag unit will alternately be identified as APLC1 or APLC2, respectively.

Plant efficiency samples are collected at the following five locations: 1) after the clarifier, 2) after the sand filters, 3) after the first air stripper, 4) after the second air stripper, and 5) in between the liquid phase carbon units. However, because the plant began operating in the bypass mode, efficiency samples are collected only at the carbon units.

For the reporting period (January to June 2015), the treatment plant operated in both normal and bypass mode. Bypass mode diverts the influent flow from the EQ tank directly into the liquid-phase carbon vessels, thus bypassing the other plant equipment (i.e., floc tank, parallel plate separator, sand filter, and air strippers). The sampling requirements and schedule are summarized in Appendix A.

A summary of the PCE and TCE results from the EQ tank and TET is provided in Table 4, while all of the monthly GETS sample results for the first half of the 2015 reporting period are summarized on Table 5. As shown on Table 5, groundwater entering the plant in the EQ tank had PCE and TCE concentrations in excess of the discharge permit limits. Water leaving the plant from the TET met the discharge limits for PCE and TCE. All discharge limits were met during the reporting period. Groundwater samples were analyzed for VOCs (USEPA Method 8260B); iron and manganese (USEPA Method 6010C); total dissolved solids (TDS) (Method SM 2540 C); total suspended solids (TSS) (Method SM 2540 D); and pH (Method SM 4500 H B).

3.1 PUMPING RATES

3.1.1 Extraction Wells

Individual extraction well pumping rates are presented in Table 6. Semi-annual daily average pumping rates from the active extraction wells ranged from approximately 31 gpm at EWI-11

to 102 gpm at EW-21. Extraction wells 2-7, 10, 12, and 14-16 were off line for a majority of the reporting period as groundwater from these wells has contained either non-detectable or only very low concentrations of COCs. These wells may be exercised periodically and or used as required to balance flow through the plant.

Extraction Wells EWS-1, EWI-8, EWI-13, and EWI-9 have been mechanically and electrically disconnected and are permanently off line. The control and power wiring for Extraction Wells EWS-1, EWI-8, EWI-13, and EWI-9 have been used for EW-20, EW-16, EW-12A, and EW-21, respectively. Extraction Wells EWS-1 and EWI-8 are now low-flow sampling locations.

As shown in Table 6, the total extraction system flow rate, as recorded by the individual extraction well totalizers, averaged approximately 449 gpm over the reporting period. The total influent flow rate, as recorded by the treatment plant totalizer and listed on Table 7, averaged 469 gpm during the reporting period and is considered to be more accurate than the sum of the individual wells.

3.1.2 Injection Wells

Individual injection well flow rates are presented in Table 8. Injection wells IW-8, IW-9, IW-10, and IW-13 through 24, as well as the injection trench, were on line throughout the entire reporting period. Semi-annual daily average flow rates for the active injection wells ranged from 9.9 gpm at IW-16 to 30.4 gpm at the injection trench.

Injection wells IW-1 through IW-7, IW-11, and IW-12 were off line for the entire reporting period and will remain off line indefinitely due to various problems (e.g., well not taking water and/or water rising to the surface).

As shown in Table 8, the total system injection flow rate, as recorded by the individual injection well totalizers, averaged approximately 327 gpm over the reporting period. The total injection flow rate, as recorded by the treatment plant totalizer and listed on Table 7, averaged 467.8 gpm during the reporting period and is considered to be more accurate than the sum of the individual wells. Additionally, information on the monthly operational performance of the injection wells is provided in Table 8.

4.0 GROUNDWATER SAMPLING

In 2005, the groundwater sampling schedule was modified, with USEPA approval, and the revised schedule was implemented. The sampling schedule is detailed in Table A-1, and is included in Appendix A. Table A-1 indicates that annual, biennial, and semi-annual groundwater sampling was conducted at the site in April 2015, and also identifies the wells that were sampled during each sampling event.

All of the wells listed in Table A-1 were sampled during the April 2015 annual, biennial, and semi-annual sampling event. Observation wells OW-2, OW-3, and OW-4 were only sampled for chloride to monitor for any inadvertent effects on water quality related to the chlorination of the treated effluent prior to injection.

The laboratory analytical results for the April 2015 sampling event are summarized in Table 9. Figure 2 shows the location of the north-south (A-A") and west-east (B-B') transects. Contaminant iso-concentration maps for the sampling event are presented in Figures 3 through 5. For wells sampled at multiple depths, only the highest concentration is recorded on the iso-concentration maps. Cross-sections along the two transects for the sampling event are presented on Figures 6 and 7. Results for each contaminant of interest are discussed below.

4.1 TETRACHLOROETHENE

The PCE iso-concentration map for the April 2015 sampling event is presented on Figure 3. As shown on Figure 3, the highest PCE concentration (49 micrograms per liter [$\mu\text{g}/\text{L}$]) was detected in monitoring well OW-40, located approximately 1,800 ft south of Cleary Junior High School.

Elevated PCE concentrations in the area east of Central Avenue extended from observation well OW-22 (located on Martinelli Avenue) to residential well R-1731 (located approximately 500 ft north of the intersection of Vine Road with Central Avenue). Although residential well R-2960 (located just north of Vine Road and west of Central Avenue) could not be sampled during the April 2015 event, PCE has previously been detected at this well in other historical sampling events.

The north-south cross section (A-A" on Figure 6) shows PCE concentrations of 10 micrograms per liter ($\mu\text{g}/\text{L}$) at well NMW-1S (at approximately 90 ft above mean sea level [amsl]), and 1.6 $\mu\text{g}/\text{L}$ at well EW-20 (at approximately 85 ft amsl) in the upgradient direction. PCE was not detected in the next nearest downgradient well sampled in April 2015 (EWS-15). PCE was next detected at the downgradient well OW-22 at a concentration of 30 $\mu\text{g}/\text{L}$ (at approximately 10 ft amsl). PCE was also detected at downgradient wells OW-23 (20 $\mu\text{g}/\text{L}$ at 5 ft bgs and 19 $\mu\text{g}/\text{L}$ at 15 ft amsl); OW-27 (1.5 J $\mu\text{g}/\text{L}$); OW-28 (9.0 $\mu\text{g}/\text{L}$); and EW-12A (4.6 $\mu\text{g}/\text{L}$). The highest concentration of PCE (49 $\mu\text{g}/\text{L}$) was detected at OW-40. As seen on Figure 3, the next nearest downgradient wells south of EWI-12 that had detectable PCE concentrations within the PCE plume east of Central Avenue are OW-30, R-108, EW-18, OW-40, OW-35I, OW-35D, and R-1731. These wells exhibited PCE concentrations of 3.7 and 10 (at -54 and -68 ft amsl, respectively); 37, 13, 49, 4.0, 5.5, and 3.1 $\mu\text{g}/\text{L}$ in April 2015.

The depths and distribution of PCE in well OW-30 are illustrated in cross-section A'-A" on Figure 6.

The west-east cross-section (B-B' on Figure 7) shows that PCE was detected at wells OW-28 (9.0 $\mu\text{g}/\text{L}$); OW-27 (1.5 $\mu\text{g}/\text{L}$); and OW-23 (20 and 19 $\mu\text{g}/\text{L}$ at approximately 5 and 15 ft amsl, respectively) during April 2015. Observation wells OW-34, OW-37, and OW-38 did not contain PCE at a concentration above the method quantitation limit.

4.2 TRICHLOROETHENE

The TCE iso-concentration map for the April 2015 sampling event is presented on Figure 4. The highest concentration of TCE was detected in monitoring well NMW-1S (190 $\mu\text{g}/\text{L}$), which is located approximately 100 ft southwest of the groundwater treatment system building. TCE was also detected in monitoring well SJCC-2, just south of the GWTP, at a concentration of 160 $\mu\text{g}/\text{L}$. Historically, elevated TCE concentrations east of Central Avenue have extended from extraction well EW-16 and observation well OW-22, which are located near the intersection of Martinelli Avenue and Central Avenue; southward to observation well OW-40, which is located on the west side of Central Avenue south of the intersection with Louis Drive. Observation well OW-22 had a TCE concentration of 6.2 $\mu\text{g}/\text{L}$, while extraction well EW-16 did not have detectable levels of TCE during April 2015. It should be noted that the TCE in observation well OW-30, located in the downgradient portion of the TCE plume on Louis Drive, has shown steadily decreasing concentrations since extraction well EW-18 was brought online; decreasing from 1,400 $\mu\text{g}/\text{L}$ (October-November 2008) to an estimated value of 0.80 $\mu\text{g}/\text{L}$ (April 2014) and to 3.9 $\mu\text{g}/\text{L}$ in October 2014. The concentration rose to 13 $\mu\text{g}/\text{L}$ in April 2015.

Consistent with previous results, elevated TCE concentrations were also observed south of the treatment plant during the April 2015 sampling event in extraction well EW-20 at 130 $\mu\text{g}/\text{L}$. This concentration is similar to recent sampling results for this well, which have ranged from 61 to 227 $\mu\text{g}/\text{L}$ since July 2010.

The north-south cross-section (A-A" on Figure 6) shows that TCE was detected at extraction well EW-20 (at approximately 85 ft amsl) in the upgradient direction, at a concentration of 130 $\mu\text{g}/\text{L}$. TCE was not detected in the next nearest downgradient well, EWS-15, but was detected in downgradient well OW-22 (at approximately 20 ft amsl), located approximately 1,750 ft south of well EW-20 at a concentration of 6.2 $\mu\text{g}/\text{L}$. This cross section also illustrates the increasing TCE concentrations in the vicinity of Cleary School and to the southeast of the school, with concentrations ranging from 2.9 to 33 $\mu\text{g}/\text{L}$. The TCE concentration at deep extraction well EW-12A (33 $\mu\text{g}/\text{L}$), located on the north side of Wheat Road, was the seventh result below 100 $\mu\text{g}/\text{L}$ since the last half 2011 sampling event, although this is an increase from 16 $\mu\text{g}/\text{L}$ detected during the last sampling event in October 2014.

The TCE concentration and distribution in wells located along cross section A'-A" on Figure 6 shows elevated levels at EW-18 (49 $\mu\text{g}/\text{L}$). TCE results from the two sampling zones at OW-30 were 3.9 and 13 $\mu\text{g}/\text{L}$ from the -54 ft amsl and -68 ft amsl sampling elevations,

respectively. The other wells located along this cross section had TCE concentrations ranging from non-detect (< 1.0 µg/L at OW-33 and OW-35I) to 49 µg/L (EW-18).

The west-east cross section (B-B' on Figure 7) shows that TCE is most concentrated at monitoring wells OW-28 and OW-37 (12 µg/L). The next highest concentration is 3.1 µg/L at nearby well OW-27, located approximately 200 ft east of OW-28.

4.3 CIS-1,2-DICHLOROETHENE

The highest detection of cis-1,2-dichloroethene (cis-1,2-DCE) was 4.5 µg/L at monitoring well NMW-1S, located approximately 100 ft west of the GWTP. The only other monitoring well with a concentration of cis-1,2-DCE higher than 1 µg/L was OW-40 (1.1 µg/L).

4.4 TOTAL VOLATILE ORGANIC COMPOUNDS

The total VOC iso-concentration map for the April 2015 groundwater sampling event is presented on Figure 5. Elevated VOC concentrations are primarily found in two areas: east of Central Avenue between Martinelli Avenue and Louis Drive, and immediately south and west of the treatment plant.

TCE and PCE are the major contributors to the total VOC concentrations, with, cis-1,2-DCE and 1,1-Dichloroethane, being minor contributors.

Acetone, benzene, chloroform, bromoform, and methyl-tert-butyl ether were also detected during the April 2015 sampling event at some wells. Concentrations of these compounds are commonly detected in some of the semi-annual sampling events. The results for acetone, benzene, chloroform, bromoform, dibromochloromethane, and methyl-tert-butyl ether were not included in the total VOC concentration calculation as these either are not site COCs or are assumed to be laboratory artifacts or anomalous results. Analytes not included in the calculation are noted in Table 9 with an asterisk.

4.5 QUALITY ASSURANCE/QUALITY CONTROL SAMPLING

QA/quality control (QC) samples were collected and analyzed as a check of field measurements and to verify the contract laboratory's performance on chemical samples. As detailed in Appendix A of the UFP-QAPP (HGL, 2014), QA/QC samples are to be collected at the following frequencies per analysis.

VOCs:

- Field duplicates: two duplicates for the semi-annual event (for monitoring well and recovery wells only, not residential wells), two duplicates for the annual event, and one duplicate for the biennial event;
- Equipment rinsate blanks: two equipment blanks for semi-annual event, two equipment blanks for the annual event, one equipment blank for the biennial event; and
- Trip blanks: one per cooler containing VOC sample vials.

Metals/TDS/TSS/Chloride:

- Field duplicates: one duplicate for the semi-annual event (for monitoring well and recovery wells only, not residential wells), one duplicate for the biennial event; and
- Equipment rinsate blanks: one equipment blank for the semi-annual event, and one equipment blank for the biennial event.

During the April 2015 groundwater sampling event, the frequency requirements for QA/QC samples were met for the trip blanks, equipment rinsate blanks, and field duplicates. QA/QC samples for the April 2015 sampling event are presented in Table 10. A total of 67 monitoring wells, 18 extraction wells, and 9 residential wells were sampled during the April 2015 sampling event. The total number of samples locations differs from the plan total due to access issues; three residential wells (R1601, R1615, and R2960) were not sampled due to accessibility issues, including a vacant house with no electricity, and disconnected piping with no sample access. Specific wells and their access issues are listed in Appendix A-1 table. A total of two field duplicate samples were collected as required to be in accordance with the QAPP. The duplicate samples were analyzed for the full VOC analysis and/or other analyses. All field duplicates were in good agreement with the results for the associated field sample.

During this reporting period, VOC analytes were not detected in groundwater rinsate blanks, as shown in Table 10.

5.0 HYDROGEOLOGIC ASSESSMENT

The depth to groundwater for 77 monitoring wells and 20 extraction wells was measured under pumping conditions on June 3, 2015, and non-pumping conditions on June 4, 2015. All of the extraction well pumps were turned on approximately 1 hour prior to collecting the groundwater level measurements under pumping conditions. All of the extraction wells were then turned off the night before collecting the groundwater level measurements under non-pumping conditions. Groundwater elevations for the June 3 and 4, 2015, monitoring events are shown in Table 11 for the monitoring wells, and Table 12 for the extraction wells. The schedule for depth-to-water measurements is shown in Table A-2 in Appendix A.

Based on the historical analysis of the groundwater flow, there are three groundwater flow regimes at the site, referred to as “shallow,” “intermediate,” and “deep.” This does not mean separate and unconnected flow systems; rather flow systems that display different characteristics at different depths and locations on the site. For the purposes of this preliminary analysis, wells were identified as shallow (less than 70 ft below grade); intermediate (70 to 130 ft below grade); and deep (greater than 130 ft below grade). The screened interval for each monitoring well is included on Table 11.

Three groundwater contour maps representing the shallow, intermediate, and deep flow regimes were prepared for the April 2015 groundwater monitoring event (Figures 8, 9, and 10). As shown on Figures 8 through 10, based on the October 2014 measurements, groundwater flows in a generally south direction with an average horizontal hydraulic gradient of approximately 0.0014 feet per foot (ft/ft) in the shallow zone (measured between OW-104 and EP-7S); 0.0014 ft/ft in the intermediate zone (measured between OW-4 and OW-35I); and 0.0018 ft/ft in the deep zone (measured between DMW-2D and OW-35D). This direction and gradient of flow are consistent with previous conditions determined for the site.

The groundwater elevations for the pumping extraction wells were included in the contouring, while the groundwater elevations for the non-pumping extraction wells were not included in the contouring shown on Figures 8 through 10. These figures show the drawdown and inferred capture zones established by the extraction wells. The map scale for these figures does not allow representation of all of the contour lines in the areas of drawdown near the extraction wells, and the drawdown is illustrated by the closed contours containing hachures indicating further drawdown is present.

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6.0 COMPLIANCE STATUS

6.1 GROUNDWATER TREATMENT SYSTEM PERFORMANCE

The GETS operated from January through June 2015, with approximately 26.75 hours of downtime. The downtime was attributed to high level in acid feed tank in January; high level in the air stripper sump in March; troubleshooting electrical problems for the extraction well power supply in May; and water level measurements, high level in the acid feed tank and LGAC replacement in June. Water leaving the plant from the treated effluent tank met all effluent discharge limits.

The GETS achieved 100% removal efficiency for PCE and TCE that entered the plant. Treatment system sampling occurred on a monthly basis, as required by the Permit Equivalent.

Approximately 1% less water was treated during the first half of 2015 than during the second half of 2014 (HGL, 2015). The mass of VOCs removed in the first half of 2015 was slightly higher than the mass removed during the second half of 2014 (HGL, 2015). The average total VOC concentration during the first half of 2015 was similar to the average total VOC concentration during the second half of 2014.

6.2 GROUNDWATER SAMPLING

Groundwater sampling was performed in accordance with the Permit Equivalent.

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7.0 FUTURE ACTIVITIES

Future activities planned at the SJCC/GSC site are as follows:

- Continue semi-annual groundwater monitoring and monthly treated effluent sampling in accordance with the NJPDES/DGW Permit Equivalency; and
- Initiate activities to gain property access for additional monitoring wells to delineate the southern extent of the downgradient plume.

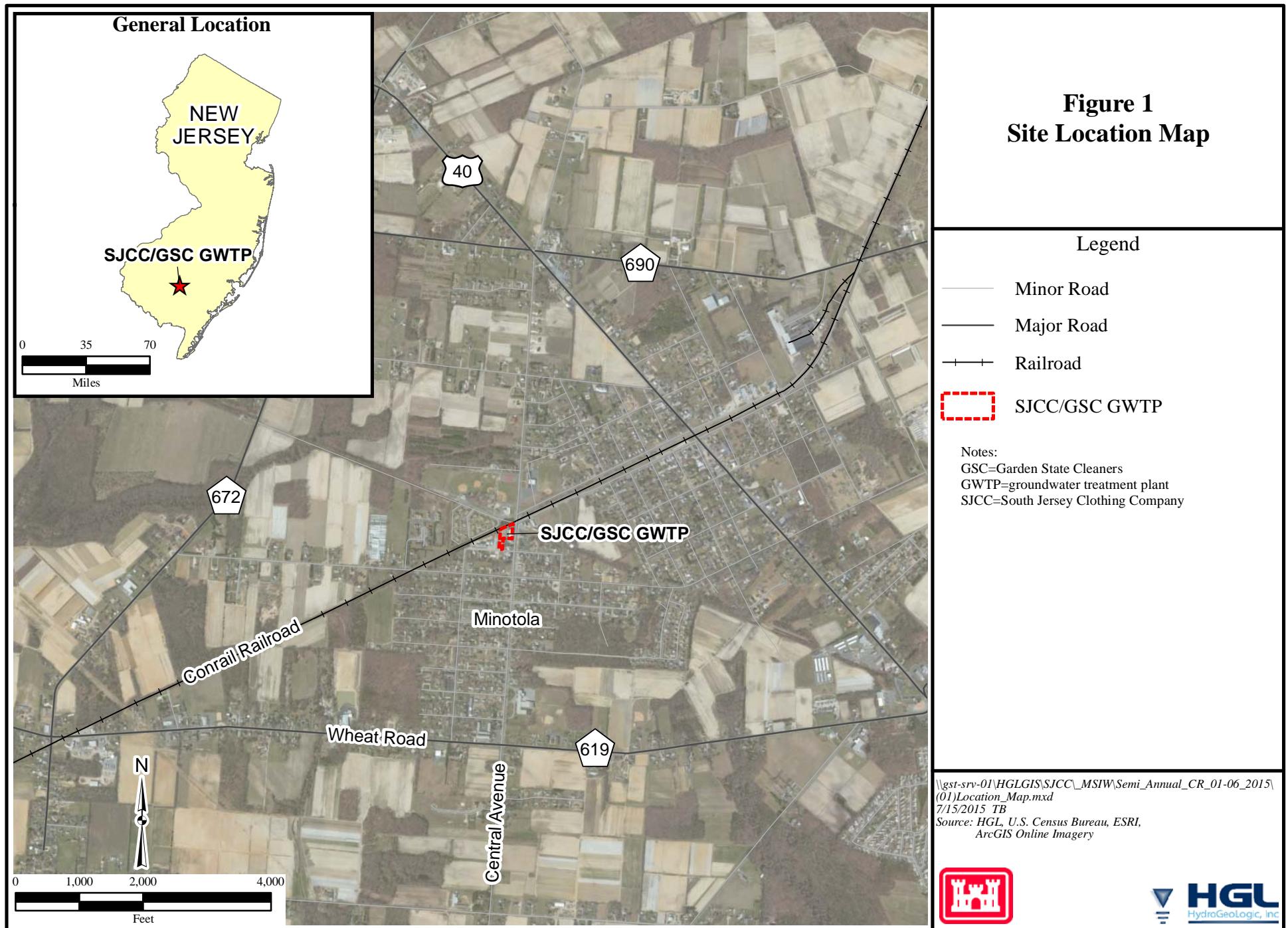
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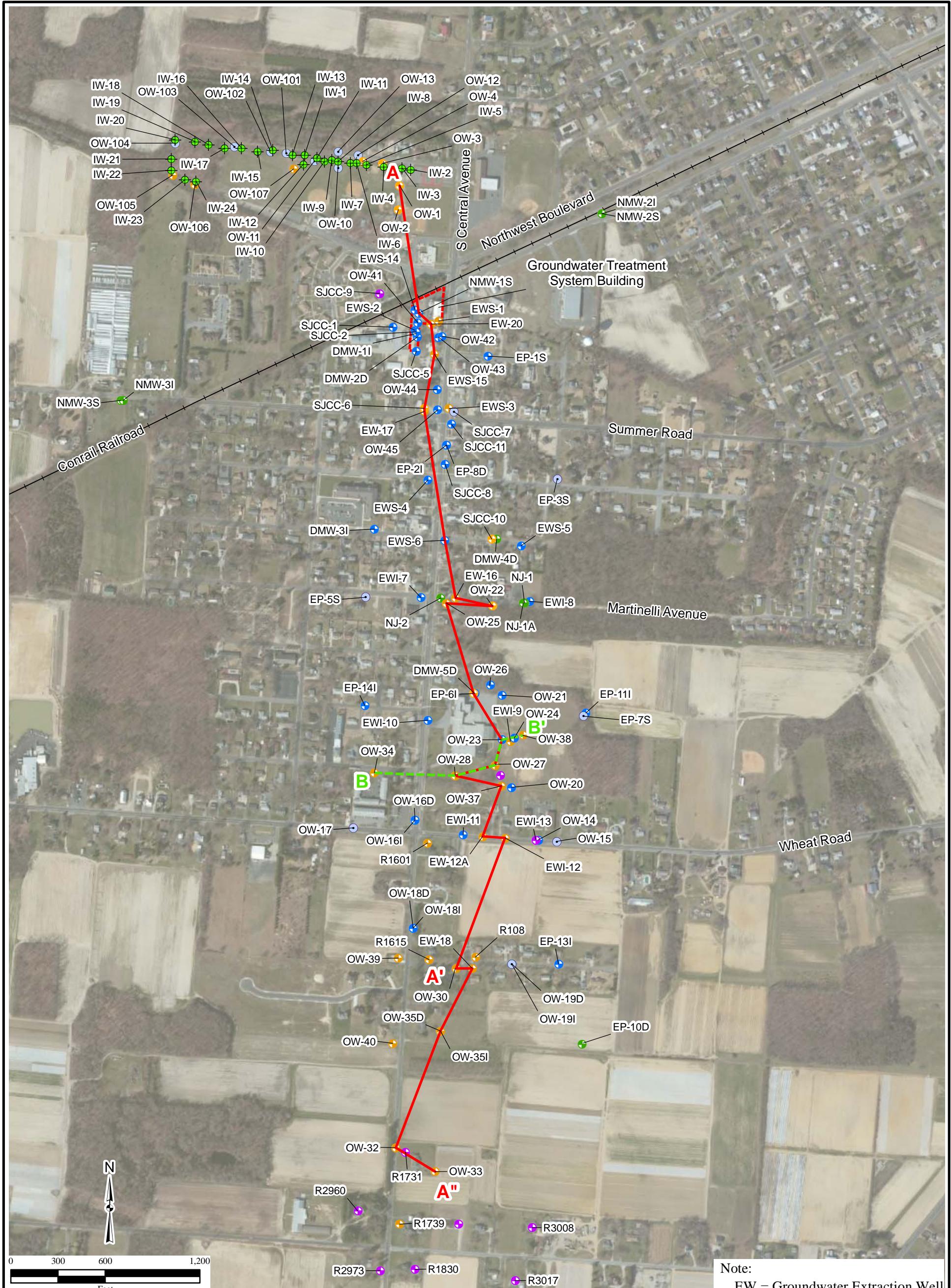
8.0 REFERENCES

- HydroGeoLogic, Inc. (HGL), 2014. *Project-Specific Uniform Federal Policy Quality Assurance Project Plan, Operation and Maintenance of the Groundwater Treatment Plant, South Jersey Clothing Company Superfund Site, Minotola, New Jersey, Revision 1, April.*
- HGL, 2015. *Semi-Annual Compliance Report, July through December 2014, Operation and Maintenance of the Groundwater Treatment Plant, South Jersey Clothing Company Superfund Site, Minotola, New Jersey.* March.
- New Jersey Department of Environmental Protection (NJDEP), 1997. *Discharge to Groundwater (NJPDES-DGW) Permit Equivalent, South Jersey Clothing Company Superfund Site, ID #NJD980766828,* April.
- NJDEP, 2005. *Discharge to Groundwater (NJPDES-DGW) Permit Equivalent Update, South Jersey Clothing Company Superfund Site,* December.
- Sevenson Environmental Services, Inc., 2012. *Operation and Maintenance Manual for the Groundwater Extraction/Treatment System, South Jersey Clothing Company/Garden State Cleaners Superfund Site, Minotola Township, New Jersey.*

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FIGURES



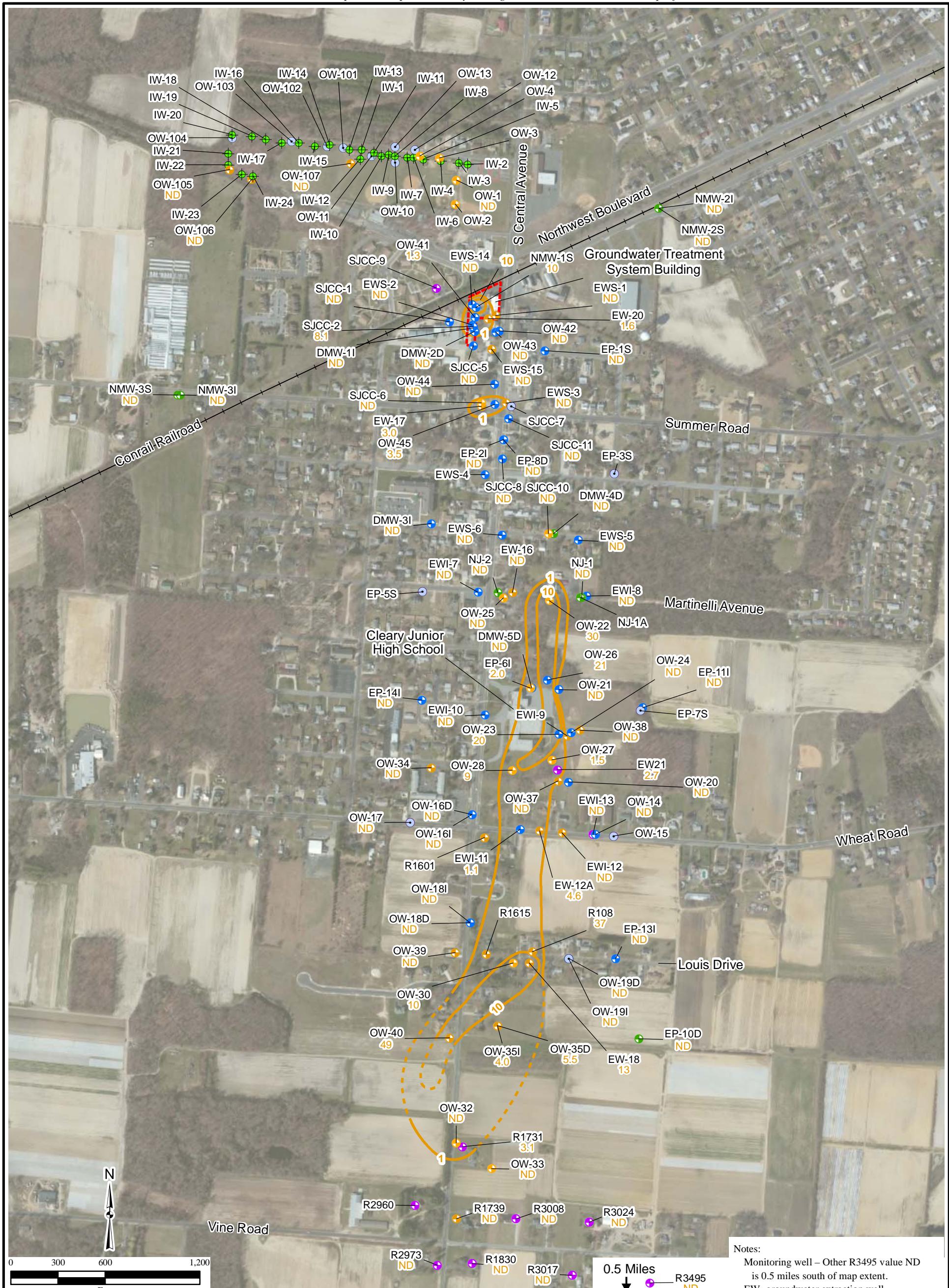


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Semi_Annual_CR_01-06_2015\
(02)Site_Map_Xsec_Loc.mxd
10/1/2015 TB
Source: USACE, NJ Office of Information Technology
ArcGIS Online Imagery



A—A'' Cross Section A-A''
B—B' Cross Section B-B'

Figure 2
Site Map with
Cross Section Locations

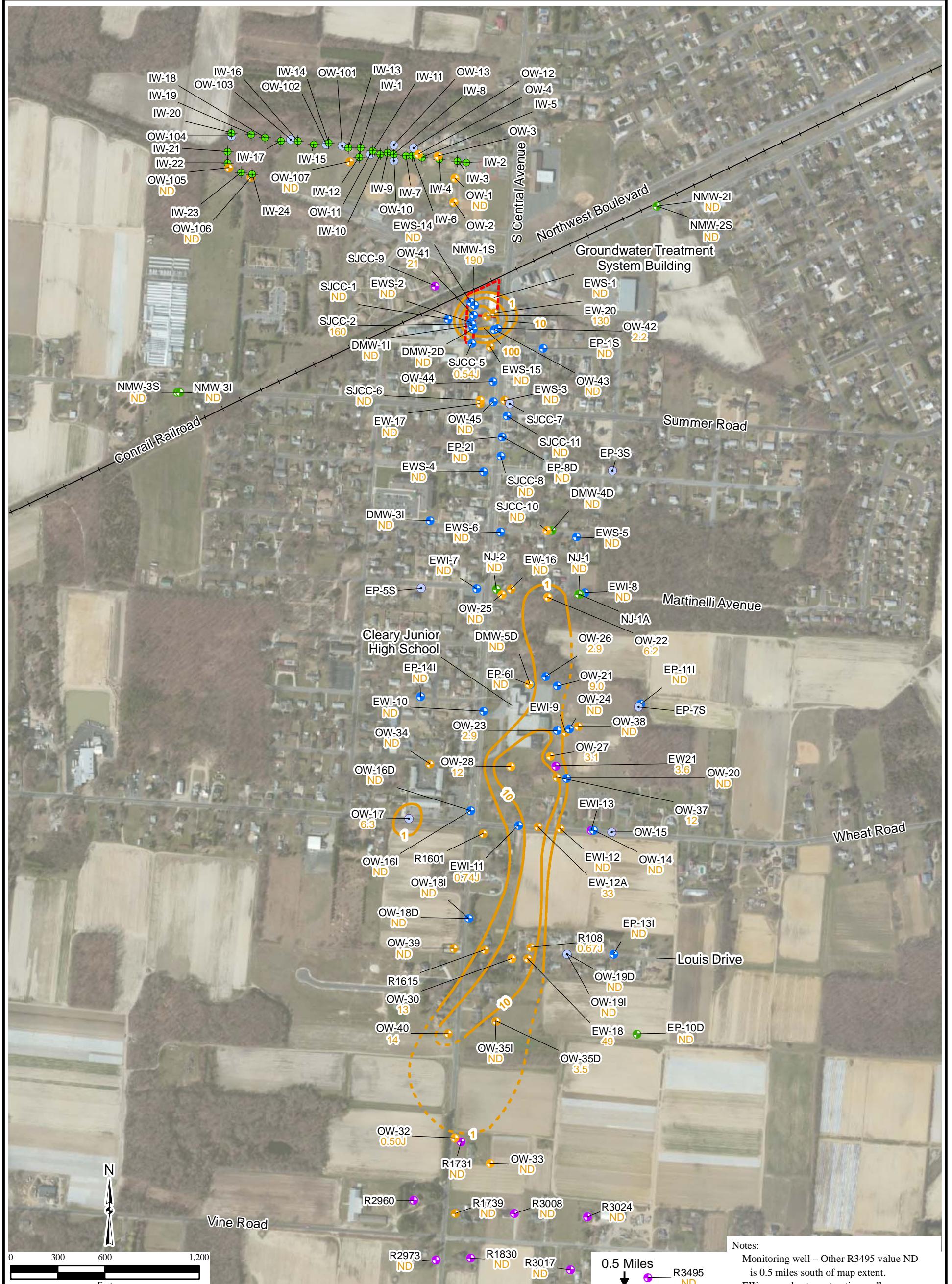


\Gst-srv-01\hglgis\SJCC_MSIW\
Semi_Annual_CR_01-06_2015\
(03)PCE Concentration Map.mxd
10/1/2015 TB
Source: USACE, NJ Office of Information Technology
ArcGIS Online Imagery

Legend	
Monitoring Well—Sampled Semi-Annually	Railroad
Monitoring Well—Sampled Annually	Site Boundary
Monitoring Well—Sampled Biennially	PCE Contour (dashed where inferred)
Monitoring Well—Water Level	
Monitoring Well—Other	
Injection Well	

Figure 3
Tetrachloroethene (PCE) Isoconcentration Map April 2015



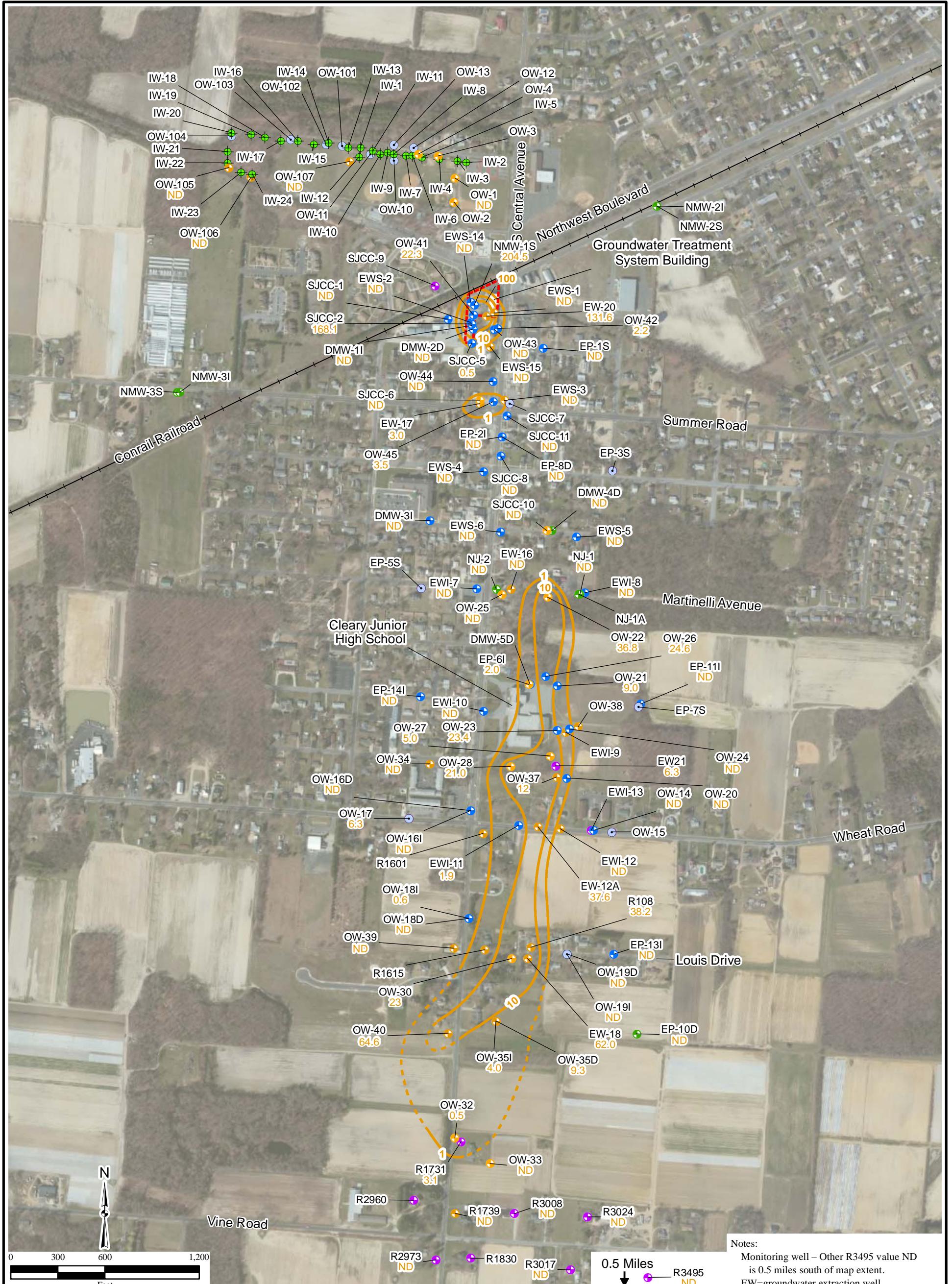


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Semi_Annual_CR_01-06_2015\
(04) TCE Concentration Map.mxd
10/1/2015 TB
Source: USACE, NJ Office of Information Technology
ArcGIS Online Imagery

Legend	
● Monitoring Well—Sampled Semi-Annually	—+— Railroad
● Monitoring Well—Sampled Annually	—-— Site Boundary
● Monitoring Well—Sampled Biennially	—1— TCE Contour (dashed where inferred)
● Monitoring Well—Water Level	
● Monitoring Well—Other	
● Injection Well	

Figure 4
Trichloroethene (TCE)
Isoconcentration Map
April 2015





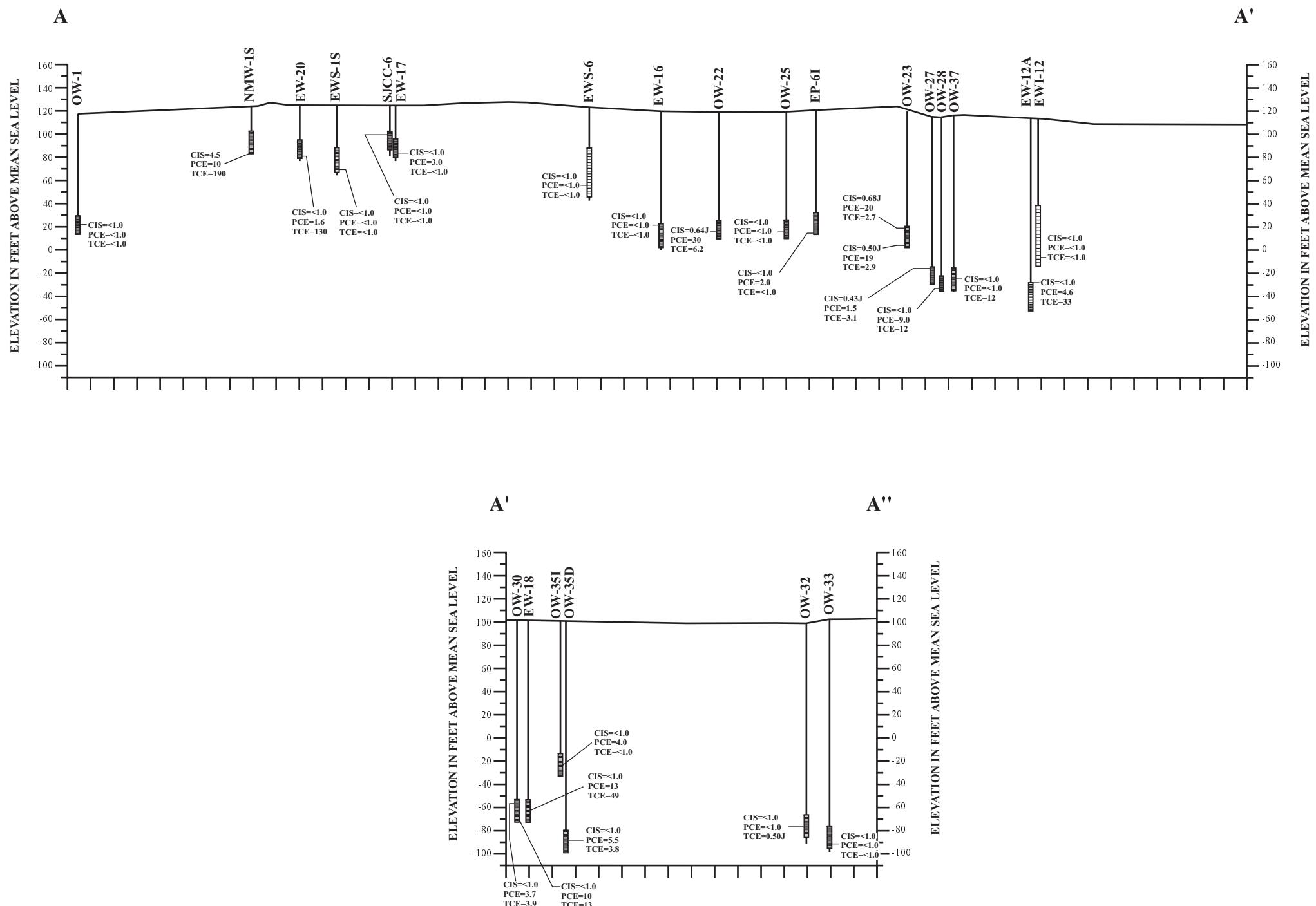
\Gst-srv-01\hglsrv\SJCC_MSIW\
Semi_Annual_CR_01-06_2015\
(05) VOCS Concentration Map.mxd
10/1/2015 TB
Source: USACE, NJ Office of Information Technology
ArcGIS Online Imagery

Legend	
● Monitoring Well—Sampled Semi-Annually	—+— Railroad
● Monitoring Well—Sampled Annually	—·— Site Boundary
● Monitoring Well—Sampled Biennially	——— VOC Contour (dashed where inferred)
● Monitoring Well—Water Level	
● Monitoring Well—Other	
● Injection Well	

Figure 5
Total Volatile Organic Compounds (VOCs) Isoconcentration Map
April 2015



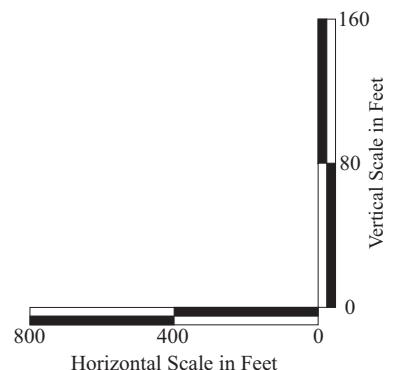
Figure 6
Cross Section A-A''
January - June 2015



Legend

	Well with Well Screen
CIS	Cis-1,2-Dichloroethene
PCE	Tetrachloroethene
TCE	Trichloroethene
J	Estimated Value, Result Below Method Quantitation Limit
NS	Not Sampled

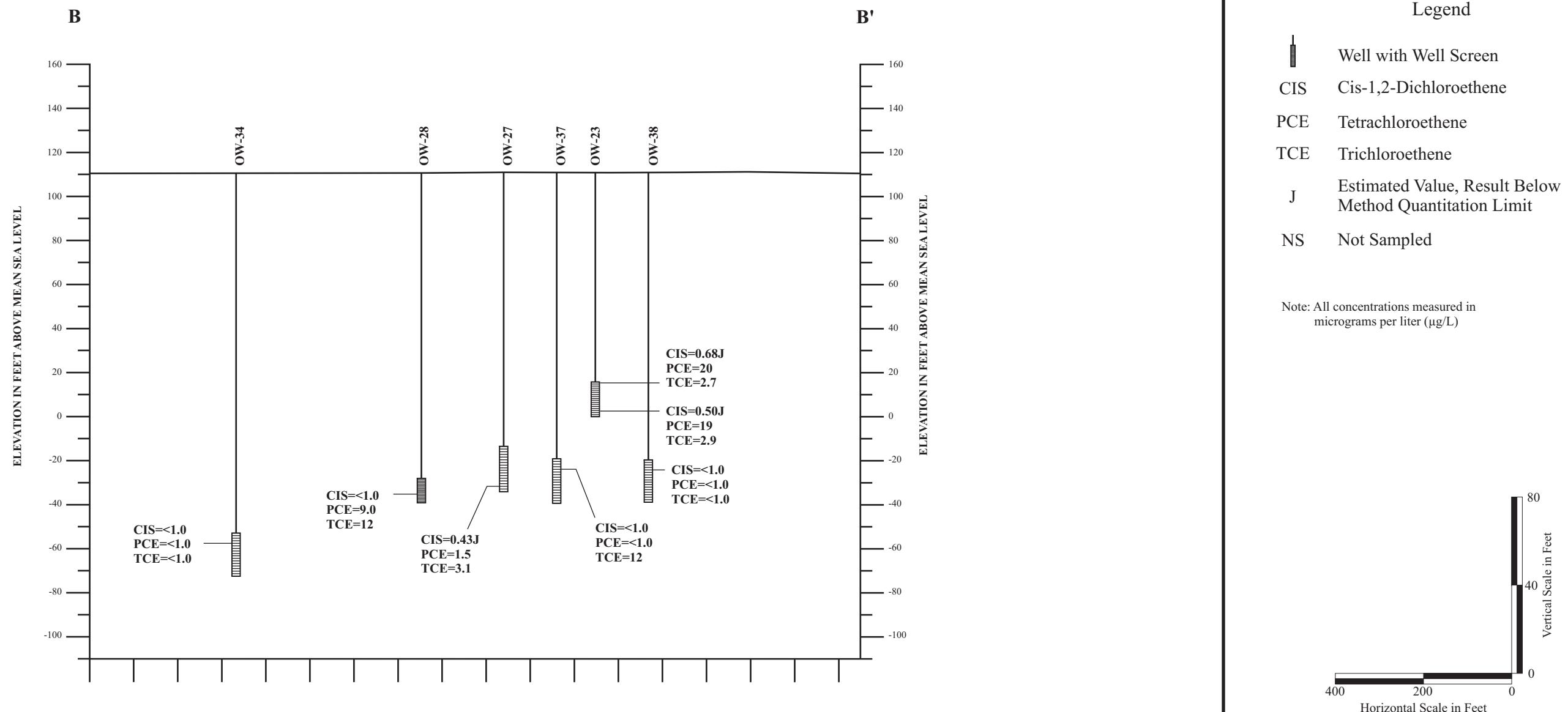
Note: All concentrations measured in micrograms per liter ($\mu\text{g/L}$)



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Cross-sec_AA.cdr
10/01/2015 TB
Source: SAIC

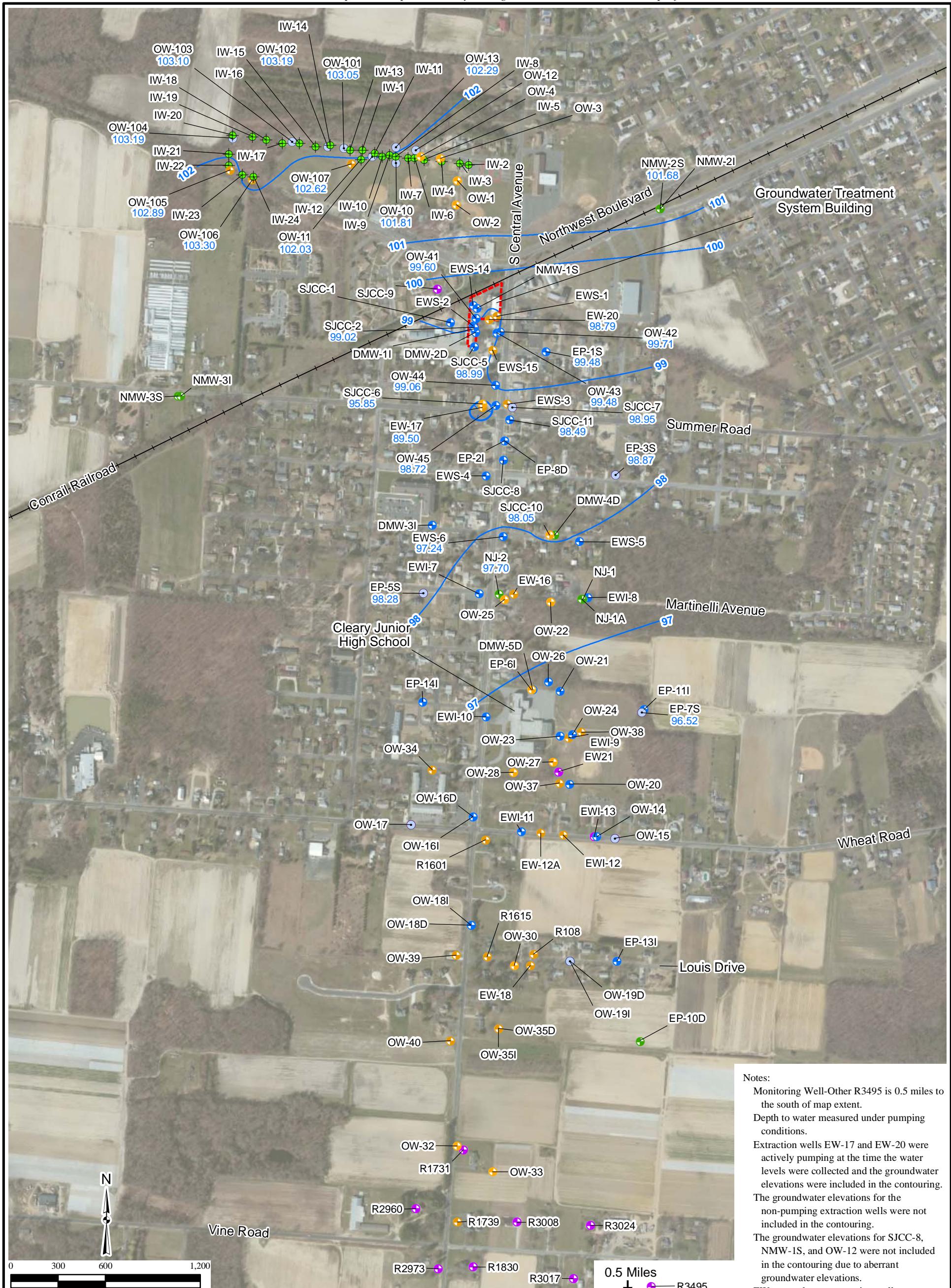


Figure 7
Cross Section B-B'
January - June 2015



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Cross-sec_BB.cdr
07/15/2015 TB
Source: SAIC





\Gst-srv-01\hglsr\GSC\MSIW
Semi_Annual_CR_01-06_2015\
(08) GWE Shallownd
8/3/2015 SS
Source: USACE, NJ Office of Information Technology
ArcGIS Online Imagery

Legend	
● Monitoring Well—Sampled Semi-Annually	—+— Railroad
● Monitoring Well—Sampled Annually	—-+--- Site Boundary
● Monitoring Well—Sampled Biennially	—98— Groundwater Elevation Contour
● Monitoring Well—Water Level	—+— Groundwater Elevation Contour Depression
● Monitoring Well—Other	
● Injection Well	

Figure 8
Groundwater Elevation
Contour Map
Shallow Wells
June 2015



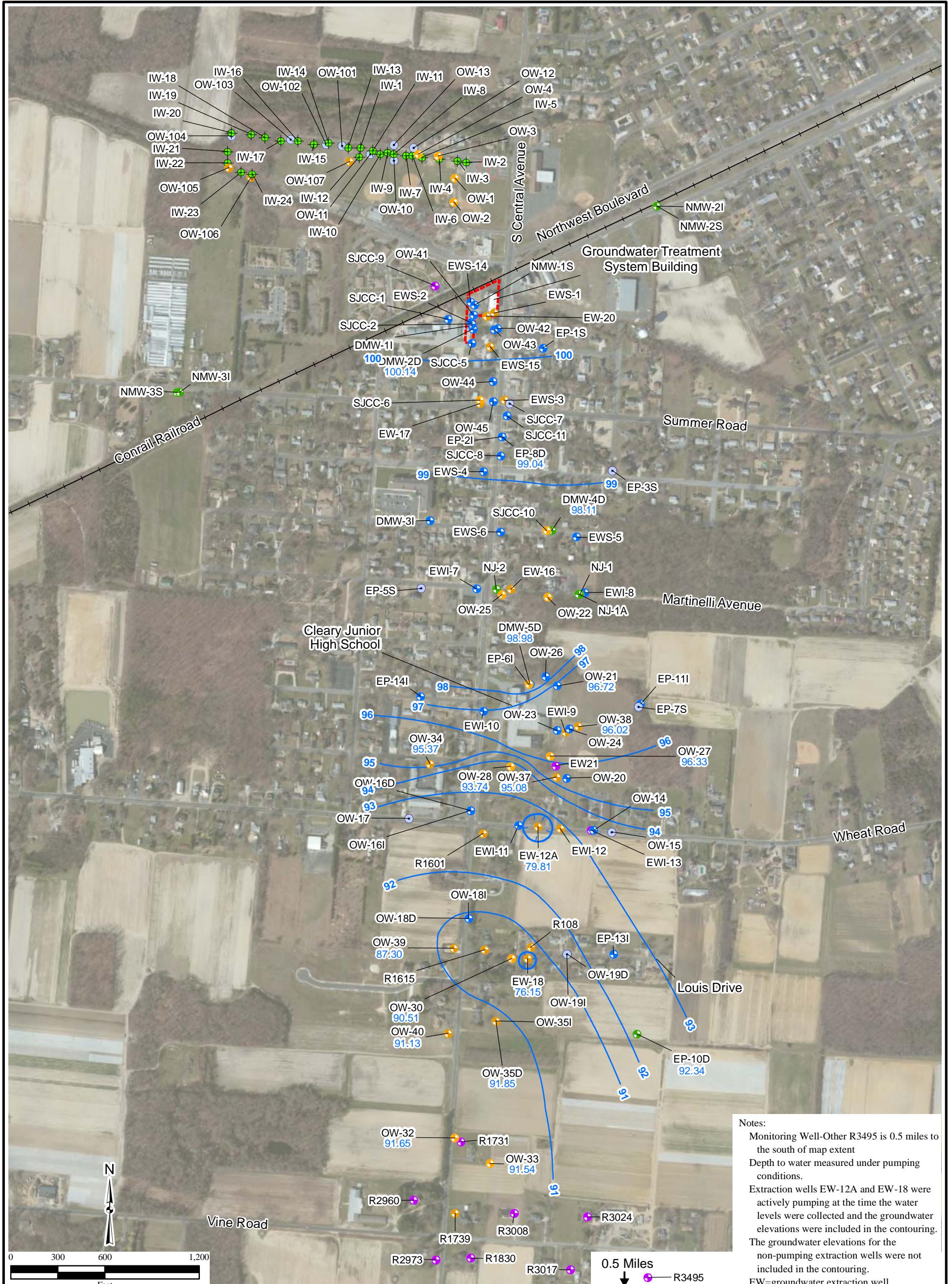
\Gst-srv-01\hglgis\SJCC_MSIW
Semi Annual CR 01-06_2015.mxd
(09) GWE Intermediate.mxd
8/5/2015 SS
Source: USACE, NJ Office of Information Technology
ArcGIS Online Imagery

- Legend**
- Monitoring Well—Sampled Semi-Annually
 - Monitoring Well—Sampled Annually
 - Monitoring Well—Sampled Biennially
 - Monitoring Well—Water Level
 - Monitoring Well—Other
 - Injection Well

- Railroad
- Site Boundary
- Groundwater Elevation Contour
- Groundwater Elevation Contour Depression

Figure 9
Groundwater Elevation
Contour Map
Intermediate Wells
June 2015





\Gst-srv-01\hglgis\SJCC_MSIW
Semi_Annual_CR_01-06_2015
(10) GWE Deep.mxd
8/3/2015 SS
Source: USACE, NJ Office of Information Technology
ArcGIS Online Imagery

- Legend**
- Monitoring Well—Sampled Semi-Annually
 - Monitoring Well—Sampled Annually
 - Monitoring Well—Sampled Biennially
 - Monitoring Well—Water Level
 - Monitoring Well—Other
 - Injection Well

- Railroad
- Site Boundary
- Groundwater Elevation Contour
- Groundwater Elevation Contour Depression

Figure 10
Groundwater Elevation
Contour Map
Deep Wells
June 2015



TABLES

Table 1
Effluent Discharge Criteria
SJCC/GSC Superfund Site¹
January - June 2015

Chemical Parameter	Discharge Limit ($\mu\text{g/L}$)
1,1-dichloroethene	2
cis-1,2-dichloroethene ²	70
1,1,1-trichloroethane ²	30
Carbon tetrachloride	2
Trichloroethene	1
Benzene	1
Tetrachloroethene	1
Chloroform	3
2-butanone	300
1,1,2-trichloroethane ²	50
Bromodichloromethane	1
Vinyl chloride	5
Chloroethane	50
Xylene ²	1,000
Total Suspended Solids	Negligible
Total Dissolved Solids	500,000
Iron	300
Manganese	50
pH	Background - 8.5 ³

Notes

$\mu\text{g/L}$ - micrograms per liter

1 -Information from Table 2 of the NJDEP Discharge to Groundwater Permit Equivalent, dated April 9, 1997.

2 - The NJ MCL for this constituent has been changed, and the SRP is using the MCL as an Interim Specific Criteria, pursuant to NJDEP internal Memorandum from Rick Gimello to staff dated 5 February 1997. Therefore, the discharge limit is set equal to the new MCL.

3 - The NJ State Secondary Drinking Water Standard for pH is 6.5 to 8.5. The pH of the receiving water is 4.5. The pH effluent criteria is set at the naturally occurring background - 8.5, but it is highly recommended to discharge the effluent water close to naturally occurring background condition.

Table 2
Downtime
SJCC/GSC Superfund Site
January - June 2015

Date	Time Down	Reason	Monthly Totals
	(hours)		
January			
1/7/2015	2.00	High level in acid feed tank	2.00
February			
	0		0.00
March			
3/1/2015	0.67	High level in the air stripper sump	0.67
April			
	0		0.00
May			
5/12/2015	4.00	Troubleshoot electrical problem with loss of power to extraction wells	4.00
June			
6/3/2015-6/4/2015	20.08	plant down to take non-pumping static water level measurements	20.08
6/13/2015	1.25	high acid feed tank alarm	
6/30/2015	6.75	LGAC vessel LPC-2 carbon replacement	
Total			26.75

Table 3
Total PCE and TCE Removed
SJCC/GSC Superfund Site
January - June 2015

1st Half 2015	Treated Gallons (Millions)	PCE Removed (Pounds)	TCE Removed (Pounds)	Total VOCs Removed (Pounds)
January	21.3	0.85	5.32	6.17
February	18.3	0.64	1.83	2.47
March	21.6	0.90	5.59	6.49
April	20.9	0.86	5.06	5.92
May	20.5	0.86	5.66	6.52
June	19.7	0.78	4.94	5.70
Total	122	4.89	28.4	33.27

Notes

PCE - Tetrachloroethene

TCE - Trichloroethene

VOCs - Volatile Organic Compounds

Table 4
System Removal Efficiency
SJCC/GSC Superfund Site
January - June 2015

Date	Parameter	EQ Concentration ($\mu\text{g/L}$)	TET Concentration ($\mu\text{g/L}$)	% Removed
1/13/2015	PCE	4.8	<0.25	100%
	TCE	30	<0.25	100%
2/10/2015	PCE	4.2	<0.25	100%
	TCE	12	<0.25	100%
3/10/2015	PCE	5	<0.25	100%
	TCE	31	<0.25	100%
4/15/2015	PCE	4.9	<1.0	100%
	TCE	29	<1.0	100%
5/20/2015	PCE	5.0	<1.0	100%
	TCE	33	<1.0	100%
6/17/2015	PCE	4.6	<1.0	100%
	TCE	30	<1.0	100%
Average	PCE	5	ND	100%
	TCE	28	ND	100%

Notes

EQ - Equilization Tank

TET - Treated Effluent Tank

$\mu\text{g/L}$ - micrograms per liter

PCE - tetrachloroethene

TCE - trichloroethene

Table 5
Groundwater Treatment System Sampling Laboratory Analytical Summary
SJCC/GSC Superfund Site
January - June 2015

Equalization Tank

Sample Location			Equalization Tank (EQ)					
Sample ID			EQ	EQ	EQ	EQ	EQ	EQ
Sample Date			1/13/15	2/10/15	3/10/15	4/15/15	5/20/15	6/17/15
Analyte	Discharge Limit	Units						
Volatile Organic Compounds by Method 8260B								
1,1,1-Trichloroethane	30	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	3	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	2	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (Total)	**	µg/L	NA	NA	NA	NA	NA	NA
2-Butanone	300	µg/L	<10	<10	<10	<10	<10	<10
Benzene	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	2	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	50	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	3	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m,p-Xylene	*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl-tert-butyl ether	**	µg/L	0.41J	0.30J	0.49J	0.50J	0.52J	0.47J
o-Xylene	*	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	1	µg/L	4.8	4.2	5.0	4.9	5.0	4.6
trans-1,2-Dichloroethene	50	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	1	µg/L	30	12	31	29	33	30
Vinyl chloride	5	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylene (Total)	1,000	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Metals by EPA Method 6010B								
Iron	0.3	mg/L	0.045J	110	0.051	<0.04	<0.04	<0.04
Manganese	0.05	mg/L	0.025	0.48	0.025	0.025	0.025	0.024
Conventional Chemistry Parameters								
pH in Water	4.5 to 8.5	pH Units	5.3	6.5	5.1	4.9	5.1	5.1
Total Dissolved Solids	500	mg/L	85	100	93	98	86	110
Total Suspended Solid	Negligible	mg/L	NA	NA	NA	NA	NA	NA

Notes

ALPC1 - after 1st liquid phase carbon absorption unit

ALPC2 - after 2nd liquid phase carbon absorption unit

NA - not analyzed for

Bold - indicates result exceeds discharge limit; or below in the case of pH

* Permit Equivalent limits total xylene to 1,000 µg/L

** Not specified in Permit Equivalent

J - estimated value

M - Manual integrated compound

(1) - Holding time exceeded

(2) - LSC/LCSD recovery outside QC limits

Table 5
Groundwater Treatment System Sampling Laboratory Analytical Summary
SJCC/GSC Superfund Site
January - June 2015

ALPC2

Sample Location			After 2nd Liquid Phase Carbon Adsorption Unit (ALPC2)											
Sample ID		ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2
Sample Date		1/5/15	1/13/15	1/20/15	1/28/15	2/5/15	2/10/15	2/18/15	2/24/15	3/4/15	3/10/15	3/18/15	3/25/15	
Analyte	Discharge Limit	Units												
Volatile Organic Compounds by Method 8260B														
1,1,1-Trichloroethane	30	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	3	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	2	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (Total)	**	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	300	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	2	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	50	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	3	µg/L	0.87J	<1.0	0.52J	<1.0	<1.0	<1.0	<1.0	0.56J	0.58J	0.62J	0.59J	0.51J
cis-1,2-Dichloroethene	70	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m,p-Xylene	*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl-tert-butyl ether	**	µg/L	0.67J	<0.50	0.47J	0.39J	0.44J	0.42J	0.39J	0.43J	0.43J	0.48J	0.50J	0.54J
o-Xylene	*	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	50	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	5	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylene (Total)	1,000	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Metals by EPA Method 6010B														
Iron	0.3	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Conventional Chemistry Parameters														
pH in Water	4.5 to 8.5	pH Units	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	500	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Suspended Solids	Negligible	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes

ALPC1 - after 1st liquid phase carbon absorption unit

ALPC2 - after 2nd liquid phase carbon absorption unit

NA - not analyzed for

Bold - indicates result exceeds discharge limit; or below in the case of pH

* Permit Equivalent limits total xylene to 1,000 µg/L

** Not specified in Permit Equivalent

J - estimated value

B - blank contamination

(1) - Holding time exceeded

(2) - LSC/LCSD recovery outside QC limits

Table 5
Groundwater Treatment System Sampling Laboratory Analytical Summary
SJCC/GSC Superfund Site
January - June 2015

ALPC2

Sample Location			After 2nd Liquid Phase Carbon Adsorption Unit (ALPC2)											
Sample ID			ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2
Sample Date			4/2/15	4/8/15	4/15/15	4/21/15	4/30/15	5/6/15	5/13/15	5/20/15	5/28/15	6/1/15	6/17/15	6/24/15
Analyte	Discharge Limit	Units												
Volatile Organic Compounds by Method 8260B														
1,1,1-Trichloroethane	30	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	3	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	2	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (Total)	**	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	300	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10
Benzene	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	2	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	50	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	3	µg/L	0.53J	0.61J	0.57J	0.55J	0.55J	0.52J	0.58J	0.58J	0.66J	0.58J	<1.0	<1.0
cis-1,2-Dichloroethene	70	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m,p-Xylene	*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl-tert-butyl ether	**	µg/L	0.37J	0.52J	0.55J	0.48J	0.50J	0.50J	0.48J	0.53J	0.55J	0.56J	0.58J	0.50J
o-Xylene	*	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Tetrachloroethene	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	50	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.52J	0.52J	0.86J	1.1	1.1	<1.0
Vinyl chloride	5	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylene (Total)	1,000	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Metals by EPA Method 6010B														
Iron	0.3	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Conventional Chemistry Parameters														
pH in Water	4.5 to 8.5	pH Units	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	500	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Suspended Solids	Negligible	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes

ALPC1 - after 1st liquid phase carbon absorption unit

ALPC2 - after 2nd liquid phase carbon absorption unit

NA - not analyzed for

Bold - indicates result exceeds discharge limit; or below in the case of

* Permit Equivalent limits total xylene to 1,000 µg/L

** Not specified in Permit Equivalent

J - estimated value

B - blank contamination

(1) - Holding time exceeded

(2) - LSC/LCSD recovery outside QC limits

Table 5
Groundwater Treatment System Sampling Laboratory Analytical Summary
SJCC/GSC Superfund Site
January - June 2015

ALPC1

Sample Location			After 1st Liquid Phase Carbon Adsorption Unit (ALPC1)	
Sample ID			ALPC1	ALPC1
Sample Date			6/11/15	6/30/15
Analyte	Discharge Limit	Units		
Volatile Organic Compounds by Method 8260B				
1,1,1-Trichloroethane	30	µg/L	<1.0	<1.0
1,1,2-Trichloroethane	3	µg/L	<1.0	<1.0
1,1-Dichlorethane	2	µg/L	<1.0	<1.0
1,2-Dichloroethene (Total)	**	µg/L	NA	NA
2-Butanone	300	µg/L	<1.0	<10
Benzene	1	µg/L	<1.0	<1.0
Bromodichloromethane	1	µg/L	<1.0	<1.0
Carbon tetrachloride	2	µg/L	<1.0	<1.0
Chloroethane	50	µg/L	<5.0	<5.0
Chloroform	3	µg/L	<1.0	<1.0
cis-1,2-Dichloroethene	70	µg/L	<1.0	<1.0
m,p-Xylene	*	µg/L	<1.0	<1.0
Methyl-tert-butyl ether	**	µg/L	0.62J	0.40J
o-Xylene	*	µg/L	<0.50	<0.50
Tetrachloroethene	1	µg/L	<1.0	<1.0
trans-1,2-Dichloroethene	50	µg/L	<1.0	<1.0
Trichloroethene	1	µg/L	<1.0	<1.0
Vinyl chloride	5	µg/L	<1.0	<1.0
Xylene (Total)	1,000	µg/L	<1.0	<1.0
Metals by EPA Method 6010B				
Iron	0.3	mg/L	NA	NA
Manganese	0.05	mg/L	NA	NA
Conventional Chemistry Parameters				
pH in Water	4.5 to 8.5	pH Units	NA	NA
Total Dissolved Solids	500	mg/L	NA	NA
Total Suspended Solids	Negligible	mg/L	NA	NA

Notes

ALPC1 - after 1st liquid phase carbon absorption unit

ALPC2 - after 2nd liquid phase carbon absorption unit

NA - not analyzed for

Bold - indicates result exceeds discharge limit; or below in the case of pH

* Permit Equivalent limits total xylene to 1,000 µg/L

** Not specified in Permit Equivalent

J - estimated value

(1) - Holding time exceeded

(2) - LSC/LCSD recovery outside QC limits

Table 5
Groundwater Treatment Sampling Laboratory Analytical Summary
SJCC/GSC Superfund Site
January - June 2015

TET

Sample Location			Treated Effluent Tank (TET)					
Sample ID			TET	TET	TET	TET	TET	TET
Sample Date			1/13/15	2/10/15	3/10/15	4/15/15	5/20/15	6/17/15
Analyte	Discharge Limit	Units						
Volatile Organic Compounds by Method 8260B								
1,1,1-Trichloroethane	30	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	3	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	2	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (Total)	**	µg/L	NA	NA	NA	NA	NA	NA
2-Butanone	300	µg/L	<10	<10	<10	<10	<10	<10
Benzene	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	2	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	50	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	3	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m,p-Xylene	*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl-tert-butyl ether	**	µg/L	<0.50	<0.50	<0.50	0.46J	0.54J	0.59J
o-Xylene	*	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	50	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	1	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	5	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylene (Total)	1,000	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Metals by EPA Method 6010B								
Iron	0.3	mg/L	0.041J	<0.04	<0.04	<0.04	<0.04	<0.04
Manganese	0.05	mg/L	0.026	0.028	0.026	0.024	0.025	0.026
Conventional Chemistry Parameters								
pH in Water	4.5 to 8.5	pH Units	5.3	5.0	5.4	5.0	4.9	5.0
Total Dissolved Solids	500	mg/L	84	64	82	100	87	81
Total Suspended Solids	Negligible	mg/L	<5.0	<5.0	<5.0	<5.0	<1.8	<1.8

Notes

ALPC1 - after 1st liquid phase carbon absorption unit

ALPC2 - after 2nd liquid phase carbon absorption unit

NA - not analyzed for

Bold - indicates result exceeds discharge limit; or below in the case of pH

* Permit Equivalent limits total xylene to 1,000 µg/L

** Not specified in Permit Equivalent

J - estimated value

(1) - Holding time exceeded

(2) - LSC/LCSD recovery outside QC limits

Table 6
Extraction Well Pumping Rates and Monthly and Semi-Annual Totals
SJCC/GSC Superfund Site
January - June 2015

Well	Daily Average Pumping Rate (gpm)						Semi-Annual Daily Average
	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	
EWS-1	Well permanently off-line.						
EWS-2	0	0	0	0	0	0	0
EWS-3	0	0	0	0	0	0	0
EWS-4	0	0	0	0	0	0	0
EWS-5	0	0	0	0	0	0	0
EWS-6	0	0	0	0	0	0	0
EWI-7	0	0	0	0	0	0	0
EWI-8	Well permanently off-line.						
EWI-9	Well permanently off-line.						
EWI-10	0	0	0	0	0	0	0
EWI-11	43.9	14.1	44.6	43.3	40.5	0	31
EWI-12	0	0	0	0.0	0	0	0
EWI-12A	100.4	104.1	101.5	98.5	92.2	95.7	99
EWI-13	Well permanently off-line.						
EW-14	0	0	0	0	0	0	0
EW-15	0	0	0	0	0	0	0
EW-16	0	0	0	0.1	0	0	0
EW-17	77.6	80.2	78.8	68.3	78.9	74.3	76
EW-18	90.0	93.1	91.0	90.5	91.4	86.0	90
EW-20	51.0	51.7	51.9	51.8	51.6	49.1	51
EW-21	103.1	105.6	104.3	103.7	95.2	98.4	102
Total	466	449	472	456	450	404	449

Well	Monthly Total (Gallons)						Semi-Annual Total (Gallons)
	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	
EWS-1	Well permanently off-line.						
EWS-2	0	0	0	0	0	0	0
EWS-3	0	0	0	0	0	0	0
EWS-4	0	0	0	0	0	0	0
EWS-5	0	0	0	0	0	0	0
EWS-6	0	0	0	0	0	0	0
EWI-7	0	0	0	0	0	0	0
EWI-8	Well permanently off-line.						
EWI-9	Well permanently off-line.						
EWI-10	0	0	0	0	0	0	0
EWI-11	1,960,568	570,215	1,989,095	1,919,350	1,809,170	0	8,248,398
EWI-12	0	0	0	0	0	0	0
EWI-12A	4,483,289	4,196,190	4,532,177	4,365,440	4,115,509	4,133,160	25,825,765
EWI-13	Well permanently off-line.						
EW-14	0	0	0	0	0	0	0
EW-15	0	0	0	4,920	0	0	4,920
EW-16	0	0	0	0	0	0	0
EW-17	3,462,200	3,232,450	3,515,750	2,951,100	3,524,000	3,208,700	19,894,200
EW-18	4,017,100	3,755,000	4,060,800	3,908,100	4,078,800	3,717,300	23,537,100
EW-20	2,277,632	2,085,196	2,316,685	2,239,260	2,301,640	2,121,648	13,342,061
EW-21	4,603,102	4,257,869	4,657,040	4,480,611	4,247,674	4,252,270	26,498,566
Total	20,803,891	18,096,920	21,071,547	19,868,781	20,076,793	17,433,078	117,351,010

Notes

- 1) gpm - gallons per minute
- 2) OL - Extraction wells EWS-1, EW-8 and EW-13 have been mechanically and electrically disconnected and are permanently offline. The control and power wiring from EW-8 and EW-13 were used for wells EW-12A and EW-16, which were brought online in March 2007. The control and power wiring for EWS-1 was used for EW-20, which was brought online in February 2009.
- 3) Extraction wells 2-7, 10, 12, and 14-16 were off-line throughout the majority of this reporting period as they continue to contain non-detectable concentrations or trace levels of contaminants. They may be exercised periodically and/or used as required to balance flow throughout the plant.
- 4) The information on this table is for individual extraction well performance and should not be compared to the treatment plant influent flow summary (provided in Table 7). The treatment plant flow summary is based on different totalizer values, which may not agree with the values for each individual well.
- 5) New extraction well EW-21 was brought online September 2013 to replace EWI-9. Extraction well EWI-9 is now permanently offline. Extraction well EWI-11 was brought online August 28, 2014.

Table 7
Treatment Plant Flow Summary
SJCC/GSC Superfund Site
January - June 2015

Month (1st Half 2015)	Monthly Average Flow (gal/month)		Daily Average Flow (gal/day)		Daily Average Flow (gal/min)	
	Extraction Well Influent Monthly Totals (gal/month)	Injected Treated Influent Monthly Totals (gal/month)	Extraction Well Influent Daily Totals (gal/day)	Injected Treated Influent Daily Totals (gal/day)	Extraction Well Influent Daily Totals (gal/min)	Injected Treated Influent Daily Totals (gal/min)
January	21,280,862	21,231,039	686,479	684,872	477	476
February	18,334,020	18,270,060	654,786	652,502	455	453
March	21,568,430	21,515,103	695,756	694,036	483	482
April	20,895,883	20,629,470	696,529	687,649	484	478
May	20,521,219	20,463,139	661,975	660,101	460	458
June	19,716,717	19,868,361	657,224	662,279	456	460
Average Total	20,386,189	20,329,529	675,458	673,573	469.1	467.8

Notes

gal/month - gallons per month

gal/day - gallons per day

gal/min - gallons per minute

Table 8
Injection Well Flow Rates and Monthly and Semi-Annual Totals
SJCC/GSC Superfund Site
January - June 2015

Well	Daily Average Pumping Rate (gpm)						Semi-Annual Daily Average
	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	
IW-1	0	0	0	0	0	0	0
IW-2	0	0	0	0	0	0	0
IW-3	0	0	0	0	0	0	0
IW-4	0	0	0	0	0	0	0
IW-5	0	0	0	0	0	0	0
IW-6	0	0	0	0	0	0	0
IW-7	0	0	0	0	0	0	0
IW-8	17.2	16.2	13.3	2.3	8.0	9.0	11.0
IW-9	26.7	25.3	28.4	30.3	26.9	27.2	27.5
IW-10	26.3	25.2	26.4	29.0	25.5	25.2	26.3
IW-11	0	0	0	0	0	0	0
IW-12	0	0	0	0	0	0	0
IW-13	11.6	12.2	51.6	37.2	3.6	0	19.4
IW-14	13.8	12.6	13.5	14.6	13.9	14.1	13.8
IW-15	11.0	10.3	13.4	14.8	13.5	18.4	13.6
IW-16	14.6	13.8	11.9	3.4	8.2	7.6	9.9
IW-17	7.8	15.2	13.7	19.2	14.7	15.5	14.4
IW-18	24.1	22.6	23.2	25.3	21.8	20.1	22.8
IW-19	19.0	18.6	23.8	26.8	26.5	27.8	23.7
IW-20	17.4	17.2	18.3	19.9	16.2	17.3	17.7
IW-21	24.5	23.7	23.5	24.7	22.9	22.0	23.6
IW-22	26.6	23.2	26.2	27.5	36.4	35.1	29.2
IW-23	24.4	21.8	23.2	24.6	21.7	23.2	23.2
IW-24	24.4	22.7	20.9	20.3	17.5	16.5	20.4
Trench	33.7	32.4	34.1	34.7	27.0	20.4	30.4
Total	323	313	365	354	304	299	327

Well	Monthly Total (Gallons)						Semi-Annual Total
	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	
IW-1	0	0	0	0	0	0	0
IW-2	0	0	0	0	0	0	0
IW-3	0	0	0	0	0	0	0
IW-4	0	0	0	0	0	0	0
IW-5	0	0	0	0	0	0	0
IW-6	0	0	0	0	0	0	0
IW-7	0	0	0	0	0	0	0
IW-8	769,575	652,310	592,511	99,000	355,500	387,127	2,856,023
IW-9	1,191,020	1,020,489	1,265,551	1,308,200	1,202,400	1,173,690	7,161,350
IW-10	1,174,060	1,017,445	1,178,565	1,252,600	1,138,800	1,086,510	6,847,980
IW-11	0	0	0	0	0	0	0
IW-12	0	0	0	0	0	0	0
IW-13	519,341	492,831	2,304,316	1,607,134	158,464	0	5,082,086
IW-14	617,045	509,268	603,072	630,298	619,117	608,175	3,586,975
IW-15	492,321	416,887	597,655	638,043	601,772	794,578	3,541,256
IW-16	651,169	555,383	532,048	145,179	364,696	328,518	2,576,993
IW-17	348,016	612,713	612,713	831,364	657,169	668,464	3,730,439
IW-18	1,073,452	910,288	1,034,021	1,092,417	973,451	867,837	5,951,466
IW-19	845,864	748,999	1,061,301	1,159,087	1,181,805	1,202,898	6,199,954
IW-20	776,823	694,820	818,293	857,569	724,246	745,516	4,617,267
IW-21	1,095,231	956,699	1,050,484	1,067,354	1,020,843	952,308	6,142,919
IW-22	1,185,466	936,565	1,171,124	1,186,957	1,625,591	1,515,001	7,620,704
IW-23	1,090,977	877,847	1,037,223	1,062,017	970,470	999,955	6,038,489
IW-24	1,090,737	916,095	931,910	875,540	780,277	710,806	5,305,365
Trench	1,506,268	1,306,588	1,521,970	1,497,817	1,206,987	882,737	7,922,367
Total	14,427,365	12,625,227	16,312,757	15,310,576	13,581,588	12,924,120	85,181,633

Notes

gpm = gallons per minute

Injection wells 1-7, and 11 through 12 were off-line throughout the majority of this reporting period due to various problems (i.e., well not taking water and/or water rising to the surface).

The information on this table is for individual injection well performance and should not be compared to the treatment plant influent flow summary (provided in Table 7). The treatment plant flow summary is based on different totalizer values, which may not agree with the values for each individual well.

Table 9
Groundwater Analytical Results
April 2015 Semi-Annual, Annual, and Biennial Sampling Event
SJCC/GSC Superfund Site
January - June 2015

		EXTRACTION WELLS																	
Well ID		EWS-1	EWS-2	EWS-3	EWS-4	EWS-5	DUP02	EWS-6	EWI-7	EWI-8	EWI-10	EWI-11	EWI-12	EW-12A	EWS-14	EWS-15	EW-16	DUP04	EW-17
Sample Depth (ft)		40	NA	NA	NA	NA	NA	NA	91.5	NA									
Sample Date		4/10/15	4/23/15	4/23/15	4/23/15	4/23/15	4/23/15	4/23/15	4/8/15	4/23/15	4/23/15	4/23/15	4/23/15	4/23/15	4/23/15	4/23/15	4/23/15	4/23/15	
Analyte Units																			
Volatile Organic Compounds by Method 8260B																			
1,1,1-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
1,1,2,2-Tetrachloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
1,1,2-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
1,1-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
1,2-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
1,1-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
1,2-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
2-Butanone	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
2-Chloroethyl vinyl ether*	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
2-Hexanone	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
4-Methyl-2-pentanone	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
Acetone*	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Benzene*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Bromodichloromethane*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Bromoform*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Bromomethane	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
Carbon disulfide	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	
Carbon tetrachloride*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Chlorobenzene	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
Chloroethane	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
Chloroform*	µg/L	<1.0	1.1	7.7	<1.0	<1.0	<1.0	<1.0	<1.0	0.87J	0.55J	<1.0	<1.0	1.9	4.2	<1.0	<1.0	0.87J	
Chloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
cis-1,2-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
cis-1,3-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Dibromochloromethane*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Ethylbenzene*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Methyl-tert-butyl ether*	µg/L	<0.50	0.42J	0.52J	<0.50	<0.50	<0.50	<0.50	<0.50	0.62J	1.8J	0.84J	0.40J	0.46J	0.46J	<0.50	<0.50	<0.50	
Methylene Chloride	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
Xylenes (Total)	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
Styrene*	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
Tetrachloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	4.6	<1.0	<1.0	<1.0	<1.0	3.0	<1.0	
Toluene*																			

Table 9
Groundwater Analytical Results
April 2015 Semi-Annual, Annual, and Biennial Sampling Event
SJCC/GSC Superfund Site
January - June 2015

Notes

Bold - denotes analyte detected above method quantitation limit

Bold - denotes alias

J - estimated value

NS - Not sampled for particular analyte

ND - Not detected above the method quanti

R - rejected result to due reason code listed

* Not included in calculation of total VOCs - assumed

laboratory artifact, anomalous or m

concern

(1) - Rinsate blank contamination

reporting limit

(2) - MS/MSD recoveries ou

(3) - Holding time exceeded

(4) - Rinsate blank and/or trip blank contamination

Table 9
Groundwater Analytical Results
April 2015 Semi-Annual, Annual, and Biennial Sampling Event
SJCC/GSC Superfund Site
January - June 2015

		MONITORING WELLS																			
Well ID		EP-1S	EP-6I	EP-8D	EP-2I	EP-10D	EP-11I	EP-13I	EP-14I	NMW-1S	NMW-2I	NMW-2S	DUP05	NMW-3S	NMW-3I	NJ-1	NJ-2	OW-1	DUP01	OW-2	
Sample Depth (ft)		41.5	105	216	105	192	127	111	117	33	110	26	23	91	63	29		95		95	
Sample Date		4/9/15		4/13/15		4/8/15		4/8/15		4/16/15		4/13/15		4/14/15		4/10/15		4/9/15		4/7/15	
Analyte	Units																				
Volatile Organic Compounds by Method 8260B																					
1,1,1-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
1,1,2-Tetrachloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
1,1,2-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
1,1-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
1,2-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
1,1-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
1,2-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
2-Butanone	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NS
2-Chloroethyl vinyl ether*	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NS
2-Hexanone	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS
4-Methyl-2-pentanone	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS
Acetone*	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NS
Benzene*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	1.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
Bromodichloromethane*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
Bromoform*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
Bromomethane	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS
Carbon disulfide	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NS
Carbon tetrachloride*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
Chlorobenzene	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS
Chloroethane	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS
Chloroform*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.95J	<1.0	<1.0	1.5	1.4	NS
Chloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
cis-1,2-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
cis-1,3-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
Dibromochloromethane*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
Ethylbenzene*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
Methyl-tert-butyl ether*	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.88J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.38J	0.38J	NS
Methylene Chloride	µg/L	<5.																			

Table 9
Groundwater Analytical Results
April 2015 Semi-Annual, Annual, and Biennial Sampling Event
SJCC/GSC Superfund Site
January - June 2015

		MONITORING WELLS													
Well ID		OW-3	OW-4	OW-14	OW-16I	OW-16D	OW-17	OW-18I	OW-18D	OW-19I	OW-19D	OW-20	OW-21	OW-22	OW-23
Sample Depth (ft)		90	90	109	85	113	112	82.5	117	80	112.5	117.5	142.5	102.5	102
Sample Date		4/6/15	4/6/15	4/16/15	4/16/15	4/16/15	4/16/15	4/10/15	4/15/15	4/14/15	4/14/15	4/13/15	4/13/15	4/7/15	4/13/15
Analyte	Units														
Volatile Organic Compounds by Method 8260B															
1,1,1-Trichloroethane	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	0.60J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone	µg/L	NS	NS	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloroethyl vinyl ether*	µg/L	NS	NS	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	µg/L	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone	µg/L	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acetone*	µg/L	NS	NS	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene*	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane*	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform*	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	µg/L	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide	µg/L	NS	NS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon tetrachloride*	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	µg/L	NS	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroethane	µg/L	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform*	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	0.50J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.64J	0.68J
cis-1,3-Dichloropropene	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane*	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene*	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl-tert-butyl ether*	µg/L	NS	NS	<1.0	0.31J	<1.0	0.76J	1.9J	4.3J	<1.0	<1.0	1.3J	1.0J	<0.50	1.2J
Methylene Chloride	µg/L	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Xylenes (Total)	µg/L	NS	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Styrene*	µg/L	NS	NS	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	30	20
Toluene*	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorethane	µg/L	NS	NS	<1.0	<1.0	<1.0	6.3	<1.0	<1.0	<1.0	<1.0	<1.0	9.0	6.2	2.7
Vinyl Acetate	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	µg/L	NS	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total VOCs	µg/L	NA	NA	0	0	0	6.3	0.6	0	0	0	0	9.0	36.8	23.4
Other Analyses															
Chloride	mg/L	14	11	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iron (Total)	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Manganese by ICP (Total)	mg/L	NS	NS	NS											

Table 9
Groundwater Analytical Results
April 2015 Semi-Annual, Annual, and Biennial Sampling Event
SJCC/GSC Superfund Site
January - June 2015

Notes-

Bold - denotes analyte detected above method quantitation limit

Bold denotes analytic

J - estimated value

NS - Not sampled for particular analyte

ND - Not detected above the method quant.

R - rejected result to due reason code listed

* Not included in calculation of total VOCs - assumed

laboratory artifact, a

concern

(1) - Rinsate blank contaminat

reporting limit

(2) - MS/MSD recoveries outs

(3) - Holding time exceeded

(3) Holding time exceeded
 (4) Rinseate blank and/or trip

(4) - Rinsate blank and/or trip

Table 9
Groundwater Analytical Results
April 2015 Semi-Annual, Annual, and Biennial Sampling Event
SJCC/GSC Superfund Site
January - June 2015

		MONITORING WELLS												
Well ID		OW-38	OW-39	OW-39	OW-40	OW-40	OW-41	OW-42	OW-43	OW-44	OW-45	OW-105	OW-106	OW-107
Sample Depth (ft)		140	162	174	172	184	33.35	32.3	34.40	33.25	33.45	60	60	60
Sample Date		4/14/15	4/15/15	4/15/15	4/16/15	4/16/15	4/10/15	4/9/15	4/9/15	4/9/15	4/8/15	4/6/15	4/6/15	4/6/15
Analyte	Units													
Volatile Organic Compounds by Method 8260B														
1,1,1-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	0.47J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloroethyl vinyl ether*	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acetone*	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene*	µg/L	<1.0	<1.0	<1.0	<1.0	0.87J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.7	1.6	<1.0
Bromomethane	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon tetrachloride*	µg/L	<1.0	<1.0	<1.0	<1.0	0.52J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroethane	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	µg/L	<1.0	<1.0	<1.0	0.91J	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl-tert-butyl ether*	µg/L	2.0J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50J	0.44J	0.35J
Methylene Chloride	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Xylenes (Total)	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Styrene*	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	µg/L	<1.0	<1.0	<1.0	47	49	1.3	<1.0	<1.0	<1.0	3.5	<1.0	<1.0	<1.0
Toluene*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorethane	µg/L	<1.0	<1.0	<1.0	14	14	21	2.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Acetate	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total VOCs	µg/L	0	0	0	61	64.6	22.3	2.2	0	0	3.5	0	0	0
Other Analyses														
Chloride	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	21	21	21
Iron (Total)	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.041J	0.077	0.24
Manganese by ICP (Total)	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0056J	0.0072J	0.028
Total Diss														

Table 9
Groundwater Analytical Results
April 2015 Semi-Annual, Annual, and Biennial Sampling Event
SJCC/GSC Superfund Site
January - June 2015

		RESIDENTIAL WELLS								
Well ID		R108	R1731	R1739	R1830	R2973	R3008	R3017	R3024	R3495
Sample Depth (ft)		NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date		4/22/15	4/22/15	4/22/15	4/22/15	4/22/15	4/22/15	4/22/15	4/22/15	4/22/15
Analyte	Units									
Volatile Organic Compounds by Method 8260B										
1,1,1-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloroethyl vinyl ether*	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acetone*	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene*	µg/L	16	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	6.2	<1.0
Bromodichloromethane*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon tetrachloride*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroethane	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	µg/L	0.48J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl-tert-butyl ether*	µg/L	<0.50	<0.50	<0.50	<0.50	0.72J	<0.50	<0.50	<0.50	2.2J
Methylene Chloride	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Xylenes (Total)	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Styrene*	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	µg/L	37	3.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene*	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorethene	µg/L	0.67J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Acetate	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total VOCs	µg/L	38.2	3.1	0	0	0	0	0	0	0
Other Analyses										
Chloride	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iron (Total)	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS
Manganese by ICP (Total)	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS
Total Dissolved Solids	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS
Total Suspended Solids	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS
pH	pH Units	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes-

Bold - denotes analyte detected above method quantitation limit

J - estimated value

NS - Not sampled for particular analyte

ND - Not detected above the method quantitation limit (MQL)

R - rejected result to due reason code listed

* Not included in calculation of total VOCs - assumed to be a laboratory artifact, anomalous or not a site contaminant of concern

(1) - Rinsate blank contamination and original result less than reporting limit

(2) - MS/MSD recoveries outside QC limits

(3) - Holding time exceeded

(4) - Rinsate blank and/or trip blank contamination

Table 10
Detected Analytes in QA/QC Samples
April 2015 Semi-Annual, Annual, and Biennial Sampling Event
SJCC/GSC Superfund Site
January - June 2015

Sample ID & Date		Trip Blank-010515	Trip Blank-011315	Trip Blank-012015	Trip Blank-012815	Trip Blank-020515	Trip Blank-021015	Field Duplicate-TET 021015	Trip Blank-021815	Trip Blank-022415	Trip Blank-030415
Sample Date	1/5/15	1/13/15	1/20/15	1/28/15	2/5/15	2/10/15	2/10/15	2/18/15	2/24/15	3/4/15	
Sample Event	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	
Analyte	Units										
Volatile Organic Compounds by Method 82608											
1,1-Dichloroethene	µg/L	<1.0	0.64J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	µg/L	NA	NA	NA	NA						
Carbon Disulfide	µg/L	NA	NA	NA	NA						
Chloroform	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L	NA	NA	NA	NA						
Methylene Chloride	µg/L	NA	NA	NA	NA						
Methyl-tert-butyl ether	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Other Analyses											
Chloride	mg/L	NA	NA	NA	NA						
Iron	mg/L	NA	NA	NA	NA	NA	NA	0.04U	NA	NA	NA
Manganese	mg/L	NA	NA	NA	NA	NA	NA	0.027	NA	NA	NA
Total Dissolved Solids	mg/L	NA	NA	NA	NA	NA	NA	85	NA	NA	NA
pH	pH Units	NA	NA	NA	NA	NA	NA	5.0	NA	NA	NA

Sample ID & Date		Trip Blank-031015	Trip Blank-031815	Trip Blank-032515	Trip Blank-040215	Trip Blank-040815	Trip Blank-041515	Trip Blank-042115	Trip Blank-043015	Trip Blank-050615	Trip Blank-051315
Sample Date	3/10/15	3/18/15	3/25/15	4/2/15	4/8/15	4/15/15	4/21/15	4/30/15	5/6/15	5/13/15	
Sample Event	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M
Analyte	Units										
Volatile Organic Compounds by Method 82608											
1,1-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	µg/L	NA									
Carbon Disulfide	µg/L	NA									
Chloroform	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	µg/L	<1.0	13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L	NA									
Methyl-tert-butyl ether	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene Chloride	µg/L	NA									
Tetrachloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorethene	µg/L	<1.0	12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Other Analyses											
Chloride	mg/L	NA									
Iron	mg/L	NA									
Manganese	mg/L	NA									
Total Dissolved Solids	mg/L	NA									
pH	pH Units	NA									

Notes

Bold - denotes analyte detected above method quantitation limit

NA - Not analyzed for particular analyte

DUP and FD - Field Duplicate

Semi-Annual GW - The April 2015 semi-annual, annual and biennial groundwater sampling event

System O&M - Treatment plant operations and maintenance sampling events

(1) Rinsate blank contamination

Table 10
Detected Analytes in QA/QC Samples
April 2015 Semi-Annual, Annual, and Biennial Sampling Event
SJCC/GSC Superfund Site
January - June 2015

Sample ID & Date		Trip Blank-052015	Trip Blank-052815	Field Duplicate-ALPC2 052815	Trip Blank-060115	Trip Blank-061115	Trip Blank-061715	Trip Blank-062415	Trip Blank-063015
Sample Date		5/20/15	5/28/15	5/28/15	6/1/15	6/11/15	6/17/15	6/24/15	6/30/15
Sample Event		System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M
Analyte	Units								
Volatile Organic Compounds by Method 8260B									
1,1-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Disulfide	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	µg/L	<1.0	<1.0	0.57J	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-tert-butyl ether	µg/L	<0.50	<0.50	0.58J	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene Chloride	µg/L	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorethene	µg/L	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0
Other Analyses									
Chloride	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
Iron	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
pH	pH Units	NA	NA	NA	NA	NA	NA	NA	NA

Sample ID & Date		DUP01-040615 OW-1	DUP02-042315 EWS-5	DUP03-041315 OW-26	DUP04-042315 EW-16	DUP05-040715 NMW2S	EB-040815	EB040615	EB-041315	EB-040715	EB041315	TB-040715
Sample Date		4/6/15	4/23/15	4/13/15	4/23/15	4/7/15	4/8/15	4/6/15	4/13/15	4/7/15	4/13/15	4/7/15
Sample Event		Semi-Annual GW	Semi-Annual GW	Semi-Annual GW	Semi-Annual GW	Semi-Annual GW	Semi-Annual GW	Semi-Annual GW	Semi-Annual GW	Semi-Annual GW	Semi-Annual GW	Semi-Annual GW
Analyte	Units											
Volatile Organic Compounds by Method 8260B												
1,1-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	µg/L	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Disulfide	µg/L	<2.0	NA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloroform	µg/L	1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	µg/L	<1.0	<1.0	0.85J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl-tert-butyl ether	µg/L	0.38J	NA	1.0J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene Chloride	µg/L	<5.0	<0.50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	µg/L	<1.0	<1.0	<1.0	20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorethene	µg/L	<1.0	<1.0	<1.0	3.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Other Analyses												
Chloride	mg/L	20	NA	NA	NA	NA	NA	3.0	NA	NA	NA	NA
Iron	mg/L	0.19	NA	NA	NA	2.9	NA	0.034J	NA	<0.04	NA	NA
Manganese	mg/L	<0.003	NA	NA	NA	0.27	NA	<0.003	NA	<0.003	NA	NA
Total Dissolved Solids	mg/L	91	NA	NA	NA	140	NA	<5.0	NA	<5.0	NA	NA
pH	pH Units	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
Detected Analytes in QA/QC Samples
April 2015 Semi-Annual, Annual, and Biennial Sampling Event
SJCC/GSC Superfund Site
January - June 2015

Sample ID & Date		TB2-040715	TB-040815	TB-040915	TB-041015	TB-041415	TB-041615	TB-042315	TB-042215	TB-041715	TB-041515
Sample Date		4/7/15	4/8/15	4/9/15	4/10/15	4/14/15	4/16/15	4/23/15	4/22/15	4/17/15	4/15/15
Sample Event		Semi-Annual GW									
Analyte	Units										
Volatile Organic Compounds by Method 8260B											
1,1-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Disulfide	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloroform	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl-tert-butyl ether	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene Chloride	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Other Analyses											
Chloride	mg/L	NA									
Iron	mg/L	NA									
Manganese	mg/L	NA									
Total Dissolved Solids	mg/L	NA									
pH	pH Units	NA									

Notes

Bold - denotes analyte detected above method quantitation limit

NA - Not analyzed for particular analyte

DUP and FD - Field Duplicate

Semi-Annual GW - The April 2015 semi-annual, annual and biennial groundwater sampling event

System O&M - Treatment plant operations and maintenance sampling events

(1) Rinsate blank contamination

Table 11
Groundwater Elevations for Monitoring Wells
SJCC/GSC Superfund Site
January - June 2015

Well ID	Screened Interval (ft bgs)	Reference Elevation (ft amsl)	3/27/2015		6/3/2015		6/4/2015	
			Pumping Conditions		Pumping Conditions		Non-Pumping Conditions	
			Depth to Water (ft below ref. el.)	Groundwater Elevation (ft amsl)	Depth to Water (ft below ref. el.)	Groundwater Elevation (ft amsl)	Depth to Water (ft below ref. el.)	Groundwater Elevation (ft amsl)
SJCC-1	25-45	124.91	NM	NM	25.45	99.46	25.29	99.62
SJCC-2	21-41	125.22	NM	NM	26.20	99.02	25.80	99.42
SJCC-5	26-46	125.24	NM	NM	26.25	98.99	25.97	99.27
SJCC-6	23-43	122.57	NM	NM	26.72	95.85	23.83	98.74
SJCC-7	25-45	126.4	NM	NM	27.45	98.95	27.14	99.26
SJCC-8	25-45	126.18	NM	NM	25.61	100.57	25.41	100.77
SJCC-10	27-47	120.72	NM	NM	22.67	98.05	22.60	98.12
SJCC-11	27-47	124.79	NM	NM	26.30	98.49	26.02	98.77
NJ-2	14-34	117.57	NM	NM	19.87	97.70	19.30	98.27
DMW-1I	104-114	126.35	NM	NM	26.52	99.83	26.33	100.02
DMW-2D	220-230	126.17	NM	NM	26.03	100.14	26.18	99.99
DMW-3I	96-106	119.37	NM	NM	20.59	98.78	20.55	98.82
DMW-4D	211-221	120.49	NM	NM	22.38	98.11	22.17	98.32
DMW-5D	220-230	121.46	NM	NM	22.48	98.98	22.77	98.69
EP-1S	29-44	126.54	NM	NM	27.06	99.48	27.01	99.53
EP-3S	23-38	123.57	NM	NM	24.70	98.87	24.66	98.91
EP-5S	18-33	116.94	NM	NM	18.72	98.22	18.66	98.28
EP-7S	22-37	116.06	NM	NM	19.54	96.52	19.31	96.75
EP-2I	90-110	126.33	NM	NM	27.35	98.98	27.15	99.18
EP-6I	90-110	121.65	NM	NM	22.95	98.70	22.28	99.37
EP-11I	112-137	115.76	NM	NM	19.20	96.56	10.90	104.86
EP-13I	95-121	103.03	NM	NM	13.30	89.73	8.35	94.68
EP-14I	102-127	111.44	NM	NM	14.28	97.16	14.07	97.37
EP-8D	197-222	126.29	NM	NM	27.25	99.04	27.18	99.11
EP-10D	187-212	103.85	NM	NM	11.51	92.34	10.74	93.11
NMW-1S	21-31	128.89	25.05	103.84	26.83	102.06	26.46	102.43
NMW-2I	105-115	117.15	14.44	102.71	15.94	101.21	15.16	101.99
NMW-2S	21-31	117.15	14.14	103.01	15.47	101.68	14.41	102.74
NMW-3I	86-96	115.05	13.77	101.28	15.27	99.78	15.88	99.17
NMW-3S	18-28	115.14	13.28	101.86	14.41	100.73	15.40	99.74
OW-1	88-103	116.54	13.29	103.25	14.87	101.67	15.02	101.52
OW-2	84.5-99.5	NM	NM	NM	NM	NM	NM	NM
OW-3	85-100	114.34	10.75	103.59	12.16	102.18	12.49	101.85
OW-4	85-100	115.44	10.83	104.61	13.48	101.96	13.99	101.45
OW-10	26-36	115.39	12.12	103.27	13.58	101.81	14.36	101.03
OW-11	26-36	114.84	11.43	103.41	12.81	102.03	13.76	101.08
OW-12	21-31	112.07	11.98	100.09	16.54	95.53	16.96	95.11
OW-13	26-36	111.41	7.65	103.76	9.12	102.29	9.97	101.44
OW-14	69.5-119.5	109.69	NM	NM	14.45	95.24	14.09	95.60
OW-15	109-124	109.57	NM	NM	14.17	95.40	14.04	95.53

Notes

ft bgs - feet below ground surface

ft amsl - feet above mean sea level

ft below ref. el. - feet below reference elevation

NM - not measured

NA - not accessible



Extraction well pumps were turned off for approximately 23 hours prior to measurement of water table elevations in monitoring wells.

Table 11
Groundwater Elevations for Monitoring Wells
SJCC/GSC Superfund Site
January - June 2015

Well ID	Screened Interval (ft bgs)	Reference Elevation (ft amsl)	3/27/2015		6/3/2015		6/4/2015	
			Pumping Conditions		Pumping Conditions		Non-Pumping Conditions	
			Depth to Water (ft below ref. el.)	Groundwater Elevation (ft amsl)	Depth to Water (ft below ref. el.)	Groundwater Elevation (ft amsl)	Depth to Water (ft below ref. el.)	Groundwater Elevation (ft amsl)
OW-16I	70-90	110.45	NM	NM	14.55	95.90	14.52	95.93
OW-16D	108-118	110.46	NM	NM	14.56	95.90	14.48	95.98
OW-17	107-117	107.23	NM	NM	13.52	93.71	11.25	95.98
OW-18I	75-90	104.99	NM	NM	10.10	94.89	9.98	95.01
OW-18D	112-122	104.96	NM	NM	10.10	94.86	9.95	95.01
OW-19I	75-85	102.83	NM	NM	7.89	94.94	7.86	94.97
OW-19D	105-120	102.77	NM	NM	7.90	94.87	7.88	94.89
OW-20	110-125	114.97	NM	NM	20.23	94.74	18.70	96.27
OW-21	135-150	120.07	NM	NM	23.35	96.72	22.73	97.34
OW-22	95-110	117.38	NM	NM	19.20	98.18	19.10	98.28
OW-23	97-117	118.38	NM	NM	22.43	95.95	21.56	96.82
OW-24	97-117	116.9	NM	NM	20.95	95.95	20.24	96.66
OW-25	95-115	118.35	NM	NM	20.23	98.12	20.11	98.24
OW-26	108.5-123.5	124.4	NM	NM	27.16	97.24	26.81	97.59
OW-27	133-148	117.64	NM	NM	21.31	glass.	20.00	97.64
OW-28	145-155	116.82	NM	NM	23.08	93.74	21.74	95.08
OW-30	155-175	103.7	NM	NM	13.19	90.51	9.19	94.51
OW-32	165-185	99.7	NM	NM	8.05	91.65	7.63	92.07
OW-33	178-198	103.06	NM	NM	11.52	91.54	11.11	91.95
OW-34	165-185	112.59	NM	NM	17.22	95.37	16.45	96.14
OW-35I	115-135	101.83	NM	NM	8.04	93.79	7.87	93.96
OW-35D	180-200	101.85	NM	NM	10.00	91.85	8.06	93.79
OW-37	135-155	115.45	NM	NM	20.37	95.08	18.95	96.50
OW-38	135-155	115.93	NM	NM	19.91	96.02	19.02	96.91
OW-39	158-178	102.9	NM	NM	15.60	87.30	9.23	93.67
OW-40	166-188	101.13	NM	NM	10.00	91.13	6.56	94.57
OW-41	25-35	124.74	NM	NM	25.14	99.60	24.64	100.10
OW-42	26.5-36.5	125.17	NM	NM	25.46	99.71	25.29	99.88
OW-43	26.5-36.5	125.48	NM	NM	26.00	99.48	25.60	99.88
OW-44	25-35	125.46	NM	NM	26.40	99.06	26.05	99.41
OW-45	25-35	124.92	NM	NM	26.20	98.72	25.69	99.23
OW-101	30-50	111.97	7.72	104.25	8.92	103.05	10.07	101.90
OW-102	25-50	111.56	7.11	104.45	8.37	103.19	10.18	101.38
OW-103	24.5-49.5	112.3	7.88	104.42	9.20	103.10	10.42	101.88
OW-104	25-50	114.06	9.59	104.47	10.87	103.19	12.15	101.91
OW-105	45-70	117.77	13.08	104.69	14.88	102.89	16.28	101.49
OW-106	45-70	118.26	13.58	104.68	14.96	103.30	16.60	101.66
OW-107	45-70	114.86	10.87	103.99	12.24	102.62	13.22	101.64

Notes

ft bgs - feet below ground surface

ft amsl - feet above mean sea level

ft below ref. el. - feet below reference elevation

NM - not measured

NA - not accessible



Extraction well pumps were turned off for approximately 23 hours prior to measurement of water table elevations in monitoring wells.

Table 12
Groundwater Elevations for Extraction Wells
SJCC/GSC Superfund Site
January - June 2015

Well ID	Screened Interval (ft bgs)	Reference Elevation (ft amsl)	6/4/2015		6/3/2015	
			Non-Pumping Conditions		Pumping Conditions	
			Depth to Water (ft below ref. el.)	Groundwater Elevation (ft amsl)	Depth to Water (ft below ref. el.)	Groundwater Elevation (ft amsl)
EWS-1	36-56	126.2	NA	NA	NA	NA
EWS-2	36-56	125.00	NM	NM	NM	NM
EWS-3	37.5-57.5	126.20	28.96	97.24	29.21	96.99
EWS-4	39-59	125.30	26.14	99.16	26.41	98.89
EWS-5	36-76	120.90	22.56	98.34	22.63	98.27
EWS-6	34-74	119.20	21.84	97.36	21.96	97.24
EWI-7	58-108	117.70	19.37	98.33	19.62	98.08
EWI-8	63-113	116.60	NA	NA	NA	NA
EWI-9	66.5-116.5	117.90	NA	NA	NA	NA
EWI-10	68-118	117.40	22.34	95.06	22.84	94.56
EWI-11	73-123	111.20	24.68	86.52	70.82	40.38
EWI-12	76-126	111.30	15.91	95.39	16.41	94.89
EW-12A	140-160	111.14	15.17	95.97	31.33	79.81
EWI-13	71.9-121.9	110.20	NA	NA	NA	NA
EWS-14	38-58	125.97	27.08	98.89	27.37	98.60
EWS-15	38-58	124.77	34.79	89.98	35.06	89.71
EW-16	95-115	118.62	24.70	93.92	25.05	93.57
EW-17	30-45	122.90	30.00	92.90	33.40	89.50
EW-18	155-175	103.42	5.27	98.15	27.27	76.15
EW-20	30-45	125.03	22.39	102.64	26.24	98.79
EW-21	105-125	115.18	36.87	78.31	67.51	47.67

Notes

NA - not applicable; well permanently offline

NM - not measured - bad transducer

ft bgs - feet below ground surface

ft amsl - feet above mean sea level

ft below sit el. - feet below site elevation

Shading indicates a pumping well

Note: Reference datum for extraction wells 1 through 13 is NGVD 1929.

* Reference elevation resurveyed on July 13, 2004. Reference datum NGVD 1988.

APPENDIX A

SAMPLING AND WATER LEVEL SCHEDULE

Table A-1
Monthly Sampling Schedule
SJCC/GSC Superfund Site
January through December 2015

LOCATION	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
GROUNDWATER TREATMENT SYSTEM												
Equalization Tank	X	X	X	X	X	X	X	X	X	X	X	X
Effluent Holding Tank	X	X	X	X	X	X	X	X	X	X	X	X
Efficiency Samples (5 locations)	X	X	X	X	X	X	X	X	X	X	X	X
Plant Vent Gas System												
Air Stream Monitoring (4 locations)	1A	1A	1A	1A								
Air Stream Sampling (4 locations)		AS			AS			AS				AS
MONITORING WELLS												
SJCC-1					gs							
SJCC-2					gs							
SJCC-5					gs							
SJCC-6					gs							gs
SJCC-8					gs							
SJCC-10					gs							gs
SJCC-11					gs							
NJ-2					gs							
DMW-5D					gs							
EP-6I					gs							gs
EP-13I					gs							
SJCC-1					gs							
DMW-1I					gs							
DMW-3I					gs							
EP-1S					gs							
EP-2I					gs							
EP-11I					gs							
EP-14I					gs							
DMW-2D					gs							
DMW-4D					gs							
EP-8D					gs							
EP-10D					gs							
NJ-1												
NJ-1A												
NMW-1S					gs							
NMW-2S					gs							
NMW-2I					gs							
NMW-3S					gs							
NMW-3I					gs							
OW-1					gs							gs
OW-2					gs							gs
OW-3					gs							gs
OW-4					gs							gs
OW-14					gs							
OW-15					gs							
OW-16I					gs							
OW-16D					gs							
OW-17					gs							
OW-18I					gs							

Table A-1
Monthly Sampling Schedule
SJCC/GSC Superfund Site
January through December 2015

LOCATION	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
OW-18D				gs								
OW-19I				gs								
OW-19D				gs								
OW-20				gs								
OW-21				gs								
OW-22				gs						gs		
OW-23				gs						gs		
OW-24				gs								
OW-25				gs						gs		
OW-26				gs								
OW-27				gs						gs		
OW-28				gs						gs		
OW-30				gs						gs		
OW-32				gs						gs		
OW-33				gs						gs		
OW-34				gs						gs		
OW-35I				gs						gs		
OW-35D				gs						gs		
OW-37				gs						gs		
OW-38				gs						gs		
OW-39										gs		
OW-40											gs	
OW-41				gs								
OW-42				gs								
OW-43				gs								
OW-44				gs								
OW-45				gs								
OW-105				gs						gs		
OW-106				gs						gs		
OW-107				gs						gs		
R108				gs						gs		
R1601 ¹¹												
R1615 ¹¹												
R1731					gs					gs		
R2960 ¹¹												
R1739					gs					gs		
R1830					gs					gs		
R3024					gs					gs		
R3017					gs					gs		
R2973					gs					gs		
R3495					gs					gs		
R3008					gs					gs		

Table A-1
Monthly Sampling Schedule
SJCC/GSC Superfund Site
January through December 2015

LOCATION	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
EXTRACTION WELLS												
EWS-1				gs						gs		
EWS-2				gs								
EWS-3				gs						gs		
EWS-4				gs								
EWS-5				gs								
EWS-6				gs								
EWI-7				gs								
EWI-8				gs								
EWI-10				gs								
EWI-11				gs								
EWI-12				gs						gs		
EWI-12A				gs						gs		
EWI-13												
EWS-14				gs								
EWS-15				gs						gs		
EW-16				gs						gs		
EW-17				gs						gs		
EW-18				gs						gs		
EW-20				gs						gs		
EW-21				gs						gs		

Notes:

1. gs: Groundwater Sample
2. X: Water Sample
3. 1A: Process Air Stream Monitoring (every 2 weeks)
4. AS: Air Sample
5. Plant Efficiency Samples: Samples are collected at the following locations -after the clarifier, after the sand filters, after the 1st air stripper, after the 2nd air stripper, in between the liquid phase carbon units.
6. Plant Vent Gas System Monitoring and Sampling: Monitoring and sampling occurs at the following locations -vent gas from the plant prior to the vapor phase carbon units, between unit no. 1 and unit no. 2, between unit no. 3 and unit no. 4, the stack emissions.
7. Refer to SAP for the sampling parameters and analytical methods.
8. Refer to SAP for well locations.
9. ** -This sample is to be taken on a bi-annual basis, starting with the October 2005 sampling event.
10. Refer to Table 4-2 for applicable analytical methods.
11. Residential wells not sampled for the reasons detailed below.
 - R1601: System off. Hole in water tank.
 - R1615: Piping removed and no means to sample. Currently a sprinkler system.
 - R2960: House vacant and electric turned off.

Table A-2
Monthly Water Level Schedule
SJCC/GSC Superfund Site
January through December 2015

LOCATION	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
MONITORING WELLS												
SJCC-1					p, np					p, np		
SJCC-2					p, np					p, np		
SJCC-5					p, np					p, np		
SJCC-6					p, np					p, np		
SJCC-7					p, np					p, np		
SJCC-8					p, np					p, np		
SJCC-10					p, np					p, np		
SJCC-11					p, np					p, np		
NJ-2					p, np					p, np		
NJ-4					p, np					p, np		
DMW-1I					p, np					p, np		
DMW-2D					p, np					p, np		
DMW-3I					p, np					p, np		
DMW-4D					p, np					p, np		
DMW-5D					p, np					p, np		
EP-1S					p, np					p, np		
EP-3S					p, np					p, np		
EP-5S					p, np					p, np		
EP-7S					p, np					p, np		
EP-2I					p, np					p, np		
EP-6I					p, np					p, np		
EP-11I					p, np					p, np		
EP-13I					p, np					p, np		
EP-14I					p, np					p, np		
EP-8D					p, np					p, np		
EP-10D					p, np					p, np		
NMW-1S			p		p, np	p				p, np		
NMW-2S		p			p, np	p				p, np		
NMW-2I		p			p, np	p				p, np		
NMW-3S		p			p, np	p				p, np		
NMW-3I		p			p, np	p				p, np		
OW-1		p			p, np	p				p, np		
OW-3		p			p, np	p				p, np		
OW-4		p			p, np	p				p, np		
OW-10		p			p, np	p				p, np		
OW-11		p			p, np	p				p, np		
OW-12		p			p, np	p				p, np		
OW-13		p			p, np	p				p, np		
OW-14					p, np					p, np		
OW-15					p, np					p, np		

Table A-2
Monthly Water Level Schedule
SJCC/GSC Superfund Site
January through December 2015

LOCATION	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
OW-16I						p, np					p, np	
OW-16D						p, np					p, np	
OW-17						p, np					p, np	
OW-18I						p, np					p, np	
OW-18D						p, np					p, np	
OW-19I						p, np					p, np	
OW-19D						p, np					p, np	
OW-20						p, np					p, np	
OW-21						p, np					p, np	
OW-22						p, np					p, np	
OW-23						p, np					p, np	
OW-24						p, np					p, np	
OW-25						p, np					p, np	
OW-26						p, np					p, np	
OW-27						p, np					p, np	
OW-28						p, np					p, np	
OW-30						p, np					p, np	
OW-32						p, np					p, np	
OW-33						p, np					p, np	
OW-34						p, np					p, np	
OW-35I						p, np					p, np	
OW-35D						p, np					p, np	
OW-37						p, np					p, np	
OW-38						p, np					p, np	
OW-39						p, np					p, np	
OW-40						p, np					p, np	
OW-41						p, np					p, np	
OW-42						p, np					p, np	
OW-43						p, np					p, np	
OW-44						p, np					p, np	
OW-45						p, np					p, np	
OW-101			p			p, np	p				p, np	
OW-102			p			p, np	p				p, np	
OW-103			p			p, np	p				p, np	
OW-104			p			p, np	p				p, np	
OW-105			p			p, np	p				p, np	
OW-106			p			p, np	p				p, np	
OW-107			p			p, np	p				p, np	

Table A-2
Monthly Water Level Schedule
SJCC/GSC Superfund Site
January through December 2015

LOCATION	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
EXTRACTION WELLS												
EWS-1												
EWS-2			p		p, np		p			p,np		
EWS-3			p		p, np		p			p,np		
EWS-4			p		p, np		p			p,np		
EWS-5			p		p, np		p			p,np		
EWS-6			p		p, np		p			p,np		
EWI-7			p		p, np		p			p,np		
EWI-8												
EWI-10			p		p, np		p			p,np		
EWI-11			p		p, np		p			p,np		
EWI-12			p		p, np		p			p,np		
EW-12A			p		p, np		p			p,np		
EWI-13												
EWS-14			p		p, np		p			p,np		
EWS-15			p		p, np		p			p,np		
EW-16			p		p, np		p			p,np		
EW-17			p		p, np		p			p,np		
EW-18			p		p, np		p			p,np		
EW-20			p		p, np		p			p,np		
EW-21			p		p, np		p			p,np		
INJECTION WELLS												
IW-8			p		p, np		p			p,np		
IW-9			p		p, np		p			p,np		
IW-10			p		p, np		p			p,np		
IW-13			p		p, np		p			p,np		
IW-14			p		p, np		p			p,np		
IW-15			p		p, np		p			p,np		
IW-16			p		p, np		p			p,np		
IW-17			p		p, np		p			p,np		
IW-18			p		p, np		p			p,np		
IW-19			p		p, np		p			p,np		
IW-20			p		p, np		p			p,np		
IW-21			p		p, np		p			p,np		
IW-22			p		p, np		p			p,np		
IW-23			p		p, np		p			p,np		
IW-24			p		p, np		p			p,np		

Notes:

p: Water Level - taken under pumping conditions

np: Water Level - taken under non-pumping conditions